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A Saturday morning seminar program used Rockland County's Community Resource Pool of professionals to teach selected students from grades 6-12 in science, art, writing, social science, government, law and "critical thinking" (logic). In addition, three concert-seminars by professional musicians were held for the elementary schools and junior high schools. Selected high school students participated in a "Horizons of Medicine" project conducted in cooperation with Columbia University.

The evaluation was made after one year of experimentation. Reports are included from the scientists, the writers, the social scientists, the "critical thinking" discussion leaders, the artists, and the musicians. Comments of the teachers and superintendent of schools as well as those of selected students are provided to give a more complete reaction. A report on parent and community reaction is recorded by P.T.A. leaders.

A spark of educational motivation was kindled in some cases. In spite of attacks through unfounded rumors, the community stood firm behind the program. The report attempts to tell what did happen in the seminars and record reactions to it rather than to make an evaluation.

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COMMUNITY RESOURCES POOL:

A Pilot Project in the Enrichment of Public Education.

REPORT

1960-1961

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THE COMMUNITY RESOURCES POOL

REPORT

1960-1961

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PART I: The Pool's First Year in a Public School System:

- What We Tried
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- Aims
- Procedures
- Highlights
- Problems

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B.	Report of the School Coordinator-	Arnold Rist, Director of Pupil Personnel Services So. Orangetown Central School Dist. #1

THE COMMUNITY RESOURCES POOL:

A Pilot Project in the Enrichment of Public Education

Report of 1960-61

INTRODUCTION:

We report at this time on the first year's experiment, using Rockland County's Community Resources Pool of local scientists, artists, writers, architects, engineers, philosophers, musicians, lawyers, political leaders, industrialists, and social scientists as an adjunct to a public school system.

In cooperation with South Orangetown Central School District #1, and at the instigation of its Parent Teacher Association Council, The Resources Pool conducted weekly Saturday seminars from November, 1960 to April, 1961, in which 250 children from grades 6 to 12 worked with practising professionals in science, art, writing, social science, government and law, and "critical thinking." In addition, three concert-seminars by professional musicians were held for all children in the District's five elementary schools and the junior high school, and selected high school students participated in the "Horizons of Medicine" project conducted by the Resources Pool in cooperation with the College of Physicians and Surgeons of Columbia University.

An evaluation of this project, after only one year, can be little more than a description of what the Resources Pool tried to do, the procedures used to fit it into the school system, and impressions of its impact, value and problems from the varying points of view of those who participated in the project directly or were able to observe it.

It is our obligation to make this report to the New World Foundation, since its grant to the Rockland Foundation for this pilot project, using the Resources Pool in a public school system, was meant to provide guidance for other communities who are searching for ways to enrich public education. During this year, we have received many requests from educators, school boards, teacher and parent groups from many parts of the United States for a "blueprint" to follow in setting up their own Resources Pools. As this report will make clear, we cannot at this time give anyone a blueprint; we are not sure that a project like the Resources Pool can be blueprinted. We can only describe, as honestly and completely as possible, what we did in this Resources Pool in the South Orangetown schools; what we think worked well; what we wish we had done differently; pitfalls to be avoided; directions to be pursued further; and our own evaluation of the success of such a venture weighed against the problems it presents in a school system.

The Resources Pool was a complex project in which diverse groups had to work together in unprecedented ways. An attempt will be made in this report to reflect the diverse points of view involved: scientist, artist, classroom teacher, school administrator, student, parent, rather than to obscure them in a single evaluation or to attempt a consensus.

Thus, this report has many authors: In Part I, the aims, procedures, highlights and problems will be described both from the point of view of the Resources Pool, by the Project Director and from the point of view of the school system by the School Coordinator. In Part II, the Saturday seminars will be evaluated by the professionals and others who participated in them; by some of the children themselves; by some of the classroom teachers and school administrators who helped plan the seminars or were able to observe indirectly their impact; and by a representative of the South Orangetown PTA Council who had the responsibility of keeping watch on the project in behalf of the community.

Each section of the report is meant to be the frank, honest observations of its author and makes no claim to be a definitive evaluation, or even to represent the opinion of all the children, or teachers, or scientists or artists or parents involved. Wherever possible, we also include actual examples of the materials used, excerpts of individual seminars, and work done by the children.

At the end of another year, we may be able to make a more precise evaluation. There is no point now in pretending to be more precise than our experience justifies. There is no point in hiding the fact that there are problems, trying to fit such a Resources Pool of people who, by nature of their work, are individual, creative, strongly self-disciplined in terms of their own professions, but unfamiliar with the disciplines of the public school system, into the established framework of a school system.

Equally, there is no point in hiding the fact that this was an exciting, exhilerating, challenging experience to the scientists, writers, artists, lawyers and others in the Pool - to work with these children; that it seemed to have a real, though elusive impact on the children; that while the elusiveness and strangeness of this project posed problems for school personnel, both Pool and School seem to feel the project valuable enough to keep trying to solve these problems.

Suffice it to say that the members of the Resources Pool were sufficiently convinced of the importance of this kind of work with children to volunteer even more time from the busy schedule of a research scientist, working artist, college professor, practicing lawyer, for a most intensive series of Saturday seminars during the coming year; that the Board of Education of South Orangetown District #1, while recognizing problems still to be solved in co-ordinating the Saturday seminars with the regular school program, voted $2,000 of taxpayers' money to continue the project; and that the most frequent comment made by the children, when polled for suggestions on improving the seminars, was that they should "last longer."

We are grateful to the New World Foundation for the new grant of $15,000 to continue the experiment for another year; to the Board of Education of South Orangetown District #1 both for its financial support and its assurances of increased participation of a non-financial nature by school personnel in administering and improving the project; and to the South Orangetown PTA Council for its continued, watchful, and infinitely helpful, support of this experiment.

To educators, parents or teachers from other communities who may read this report for guidance in setting up their own Resources Pool, we address a particular warning: This is the way it worked here; what you try may, and probably should, be quite different, depending on the particular community resources you are able to draw on, and the particular needs and wishes of your own school system. You may or may not encounter the problems we faced here; you may find ways to avoid them or solve them better; you may want to work out a different kind of relationship between Resources Pool and school system.

To those who want more precise answers than we are able to give here, or have different answers based on their own experience, we extend, on behalf of the Rockland Foundation, an early invitation to come to the conference next spring that will terminate our present grant - to observe the actual experience of the Saturday seminars in South Orangetown and then meet with members of the Resources Pool, South Orangetown School personnel, and those who are trying such experiments in other communities, and discuss the problems and values.

Perhaps by pooling our experiences and insights, we will all get a clearer idea of how best to use the creative resources of the community to enrich our children's education.

COMMUNITY RESOURCES POOL
ROCKLAND FOUNDATION
GREENBUSH ROAD
WEST NYACK, N. Y.

A. Report of Betty Friedan, Project Director (Chairman, Community Resources Pool)

The nature of this experiment was such that it is impossible to report on it, much less evaluate it, from a single point of view. Each section of the report is intended, therefore, to reflect solely - and honestly - the point of view of the particular participant-observer who wrote it. A certain amount of repetition is inevitable as participants with varying responsibilities in the project comment on the same events. However, in order fully to reflect the composite elements of such a project, each Pool and School coordinator, individual scientist and teacher wrote his report without seeing the others. The Project Director, in compiling these reports made no attempt to edit them. For the only way to find the answer to the questions of this experiment is to get the whole picture.

There are actually two questions in this experiment, which, of course, was not an experiment at all in the scientific sense, but rather an innovation, an experimental venture, a pilot project. It was an idea, which some people in one community tried out, and which attracted national attention among parents and educators because it seemed to fill a need in many communities. The first idea was that the spark of creative identity might be fanned in the ongoing generation by bringing school children together with creative scientists, artists, social, political and industrial thinkers of the community. The second idea was that this might be done in the public school system.

The first section of this report is written from the point of view of the organizer of the Resources Pool, which, over a three-year period, had worked out some ways for children to get this "spark" from some of the creative citizens of Rockland County. An account of these ways in which creative citizens who are not trained as school teachers can pass their "spark" to children is an important result of the project and is made in detail in the various reports.

But the first question: can and will a scientist, artist, or state assemblyman work with children, and inspire them, could be answered in the affirmative, with quite a different answer to the second question: can and should these people do this work in a public school system? And here, one would have to say in advance that no matter how inspiring for schoolchildren and artist or scientist to work together, it should not be done in a school system if it has adverse effects on the teachers who bear the main responsibilities for the teaching of our children.

On the basis of three years' experience in leading a Pool of scientists, artists, social scientists, professionals and creative businessmen, and in finding the conditions under which they would, and could, work with some intensity with children, I had the main responsibility, under the grant of the New World Foundation, of finding out if the Pool could work on a much larger scale in the school system. The system chosen was South Orangetown Central District #1, not because it offered any special conditions or needs, but because the Superintendent of Schools and the community, through its PTA Council, had already initiated procedures to use such a Resources Pool in the Schools.

As project director, it was my responsibility to structure with them a way which would enable the Pool to work in the school system, without losing that "spark" which had kept it working together on a less structured, highly spontaneous basis for three years previously. Knowing that spontaneity was essential to the Pool's work, I had to work out, with the Superintendent of Schools and his Resource Coordinator, ways in which that spontaneity could be maintained, and yet meet the school system's need to structure and control it. I was also responsible for making this report, at the end of the year, on how and why it worked - as work it did in 1960-61; to report the procedures Pool and School evolved "playing it by ear" as we had to if we wanted it to work, so that they could be used elsewhere; and to report the strains and apparent problems as well as the values, so this and other communities might be able to judge whether such a Resources Pool could work as a more or less permanent adjunct in a school system.

It must be remembered that I make this report, as I organized the Resources Pool, not as an educator, but as a citizen - a writer by profession, a psychologist by training, and a parent of school children - and, in all three capacities, deeply concerned with the values of individual identity and creativity, as related to education. I do not write from the institutional point of view of the professional educator, though I respect it, but from the point of view of the kind of people a school system would draw on for such a Resources Pool, in any community.

In this distinction, which is real, though not as great as misunderstandings and prejudice can make it seem, lies part of the reason why it is not really possible to answer the second question of this project on the basis of this single year. It took a good part of that year for the Resources Pool and the teachers to understand the real problems and possibilities of this project, from each other's point of view, well enough to begin really working together. Unfortunately, at this point, the School District was disrupted by a series of events, not directly related to the Resources Project, but inevitably affecting it, which culminated in the resignation of the Superintendent of Schools, Dr. E. S. Michelson, whose vision had made it possible to use these unorthodox resources in the schools, and who had largely decided the procedures under which it worked.

If this report had been written when the Saturday seminars ended in late April, one might have been much more definitive in saying yes, a Resources Pool can work as an adjunct to a school system, providing there is enough desire on the part of both parties for such a project to get past initial misunderstandings. At that point, teachers and Pool members met in final evaluation meetings, and many teachers had suggestions about new ways to use the Resources Pool next year, in addition to the Saturday seminars. The Board of Education included funds for the project in its tax budget at this time. The Resources Pool year ended with the long-delayed concert series, which was enthusiastically received.

In late June, however, at the crest of the tension following the resignation of the Superintendent of Schools, an attack was made on the Pool by a committee of teachers and a certain segment of the community, which had probably from the beginning been hostile to the Pool. This attack will be discussed later as an example of the kind of problem potential members of any Resources Pool may have to anticipate. It did not convince either Pool members, or the school board, to discontinue the Resources project here, and as a matter of fact, it brought to light the fact that support for the project was strong among parents, and in the community. But while there were many attendant circumstances surrounding this attack, that may not have been related to the Resources project as such, the possibility could not be ignored that such a Pool of outside professionals creates too many tensions among teachers if it is conducted in such close relationship to a school system.

Perhaps, if this is the case, and yet the Saturday morning experience of the children was valuable, one should institutionalize it in its own terms, rather than try to coordinate it with the school system. Or perhaps one should abandon the Resources Pool, in the present intensive form, and merely hope that it will demonstrate to schools and teachers that they can call on scientists, artists and others to come into the regular classroom. Would that fill the same aim, provide the same spark, as the more intensive seminars? Would scientists, artists, and other work, or be used, with the same continuity, in a program completely run by the school itself, without the Resource Pool's relatively autonomous structure? Is it inherently impossible for such a group of outside professionals to work in a harmonious adjunct relationship to a school system; can it ever be structured sufficiently; is the tension among teachers inevitable, or inevitably too severe; are there possible benefits of the "dialogue" that such a project institutes between teachers and artists, scientists, writers, practitioners of the social sciences, that make even the tensions not necessarily unhealthy?

These are questions that occur to us in the Pool, as we review what we tried to do and how it worked last year, and try to further clarify our aims, and improve procedures, to see if such a Resources Pool can work better in South Orangetown next year, and to pass on our experience to those who are tying this sort of thing in other communities.

Aims and History:

What we set out to do in the Resources Pool was to give students an early sense of what it is really like to be a scientist or artist, to discover something new about the world, to create a picture or a poem, to solve an important problem of government, or society, or any of the fields of thought which are our new frontier - simply by having them work with such creative citizens from the community.

It was the feeling of those of us who started the Resources Pool in 19~~4~~58, under the auspices of the Rockland Foundation, that it is becoming increasingly difficult for children who grow up in an American suburb or city, to find their own identity - that is, to find the work to which they can commit themselves, and realize their human potential. We who started the Pool were ourselves engaged in varying professions to which we had committed ourselves, early or late, and in which we had achieved our own identity. We had reason to know that the person who finds his work early enough, and works at it hard enough to find himself, is lucky - and we wanted this for our own children.

Further, we believed it might be important for this nation for all children to get a more real and vivid sense of the values involved here -- the satisfaction of using one's mind, in critical and creative work, of committing oneself to an important problem of society. With the enormous growth of the population, the growing complexity of knowledge, and the resulting brutal competition to get into college, we knew that more and more children, including some of our own, were not finding themselves in time. Sometimes, neither the child's own parents, or the school, seem able to help him find himself soon enough to take what he needs from school. We knew personally, as educators now know, that some children can get the best grades without really finding themselves - and some children of great potential ability don't get good grades in school because they haven't found themselves.

We thought that working with a scientist on real problems of science for a few hours a week might give such a child the desire to be a scientist - in a way that was quite different from learning the facts of science at school. That working with an artist or an architect, or a writer, or an anthropologist, or a lawyer, or a city planner, or a cancer researcher - on the problems of his own field - might give a child the needed spark in a way that was quite different from learning the facts of the field at school, or hearing "career talk" about it.

We tried it for three years in a small informal Saturday set of seminars led by creative people of our community, sponsored by the Rockland Foundation, and we knew that something exciting, both to the leader and child, was happening. We thought it might have more value if it was somehow related to the child's schoolwork, which is the realistic core of his growing life and in which he must finally put his spark to work to achieve real identity in society. In America today it is not too easy to become a scientist by tinkering at home; one almost has to get the necessary degrees, fellowships, the tools of the discipline, from school, college, university.

But when the South Orangetown PTA Council and school administrators asked us to work out a way of using the Resources Pool in seminars that would be a direct adjunct of the regular school program, we had some reservations. We weren't sure that the spark that had characterized the Intellectual Resources Pool, as we called it in the early before-school days, wouldn't be lost, by trying to pin it down to public school procedures.

The determination of the parents in the South Orangetown PTA that these intellectual resources of the community could be used in the schools, the assurance of school district administrators that simple procedures could be worked out, and the grant of $13,000 from the New World Foundation provided the necessary ingredients for the experiment. There was also the feeling of a great many, though not all, members of the Resources Pool that it would be better to do this work within the framework of the public school system, even if it meant dullying the spark a bit by school "red tape" and spending some time on paperwork.

For the people in the Resources Pool are firmly committed to public education. If we did not believe it was important and possible in the American public school system to give all children the kind of education needed for each to realize his highest potential, we would never have subjected ourselves to the hours of work, the personal irritations, as well as the deep satisfactions involved for us to work within a school system. We do this work with school children neither for the money, nor professional advancement, nor personal glory; it is exciting, this work with children.

This first year in a public school system was harder than any of us had anticipated. But none of us would have missed it for the world.

Procedures:

Early in 1960, with the approval of the administration of the South Orangetown schools, the PTA Council set up a committee to investigate ways of using the non-financial resources of the community in the schools. Knowing that many of the scientists, writers and other professionals in Rockland County were already working together in what was then called the Intellectual Resources Pool in the Rockland Foundation (a non-profit community center for arts, science and education), the PTA Committee approached me, as organizer of the Pool and also a South Orangetown parent, and suggested a cooperative venture.

The Resources Pool at that time consisted of approximately 100 persons of almost every profession, of whom about 20 had been working intensively with Saturday morning groups of children and teenagers for several years; the rest had given occasional "one-shot" lectures in these groups and in various public schools to which the Pool, from the beginning, had offered its services.

In the new cooperative venture with the South Orangetown school district, it was decided to rename the pool "The Community Resources Pool" and to structure a three-way working relationship between the Resources Pool and School personnel, with the PTA Committee serving as liaison, and performing a function of community sponsorship, watchdog, information center and catchall assistance which took varying forms as the project evolved, and which proved invaluable. At the suggestion of Dr. E. S. Michelson, then superintendent of schools, it was decided to use the Pool primarily for intensive seminars for selected students of the upper grades and, secondarily, for occasional classroom lectures, field trips, or assembly programs where teachers or principals might request it, to enrich a particular part of the school curriculum.

School-Pool Planning Committees: Superintendent Michelson suggested that committees of Resource Pool and classroom teachers be set up in each discipline to plan the seminars and explore other possible uses of Resources people. It was felt that the teachers had to plan the seminars with the persons who would later conduct them, both to insure that they be properly coordinated to enrich rather than interfere with the school curriculum, and to give the outside professional people some guidance as to the previous training and abilities of school children at the various age levels.

It was also understood by the Pool that when such a project is undertaken in a school system, the school is responsible for it. To this end, while the Pool was, in a sense, autonomous - an independent partner of the school in this venture - and administered itself, with its own project director and its own coordinators in each field chosen from the scientists, writers and others in the Pool, and within this framework, the individual professionals were given a relatively free hand on Saturday morning -- the school system maintained supervision of the project through the school's coordinator (the District Director of Pupil Personnel, who was present every Saturday), by the coordinating committees of teachers in each discipline who not only helped plan the seminars, but met at the close of each six-week unit with the seminar leaders for a running evaluation; and finally by submission of written plans for all seminars, and the personnel who were to lead them, for approval by the Board of Education.

The Superintendent of Schools, the School Coordinator, and the head of the PTA Council also sat ex-officio on the administrative committee of the grant, which was obtained by the Rockland Foundation for the Resources Pool project. But the real control of the project in the school system was always in the hands of the Superintendent of Schools. As presiding officer of the District, he made the decisions as to how the Pool should be used in the schools, what seminars should be held and in what fields, and how they should be planned; it was he who structured the respective responsibilities of Pool scientists, artists and coordinators for the actual conduct of the seminars and named the school personnel for planning committees. He used the Resources Pool with great sensitivity, and treated the Pool coordinators and the project director with respect as fellow professionals. Perhaps it was this respect which Dr. Michelson felt for scientists, writers, social scientists, and his own feeling that such people could be used to value in a school system, that made it possible for the Community Resources Pool to work in South Orangetown. From my own vantage post as head of the Pool, I learned that when the superintendent of schools who runs the district wants to use such resources, the procedures which seem such an insurmountable obstacle to get a project like this underway are found.

We had thought, for instance, that a Pool like this couldn't work in the schools because artists, who may not have been to college, and research scientists, who may be Ph.D's, but have never taken education courses, couldn't be certified. But we now learned that when such persons are used for what they are, as outside professionals, there is no question of their "certification" as school teachers. The superintendent used the Pool's own criteria of professional competence, and in addition, discussed details of new aspects of the project with the Pool and School coordinators as they arose, and personally interviewed new Pool personnel who were to take leading parts.

When any problem arose, or the need for a change, the project director consulted the Superintendent of Schools. According to the protocol of school systems, it was only through the Superintendent that the Pool dealt with the Board of Education, and through the school coordinators named by the Superintendent that members of the Pool dealt with teachers. He drew up with the Pool and School Coordinators plans for expanding the project in 1961-62, after meeting separately with teachers who participated in the project. The Superintendent also encouraged the PTA's role as community liaison for the Pool.

Community Liaison: It is important to realize that the Community Resources project in South Orangetown was a community project from the beginning; that, in fact, it was put together by the Council of PTA's of the District's six schools. This PTA sponsorship was essential in getting the project under way, and also insured that the Pool remain responsible to and responsive to the community. Procedures were set up through the PTA Council by which the responsible and intelligent community leadership that brought all the elements of this unorthodox venture together and tried to keep the community fully informed of the progress of the project.

The people who make up the Resources Pool itself, are by nature of their professions the "eggheads" of the community; for the most part they do not have the time or inclination for involvement in day-to-day community activities, such as PTA. It took the organizational wisdom and community awareness of the leaders of the PTAs here - plus their educational vision and sense of possibility - to get this project started in a minimum amount of time, and to insure the maximum community support it needed.

"Eggheads" are too suspect still in most American communities, including Rockland County, to conduct a project like this in a public school system, without such community support. Members of the PTA Committee, which brought the Community Resources Pool into being in South Orangetown, personally visited each school's principal and teachers to discuss needs the Pool might fill, served as community coordinators for each planning committee of Pool and School personnel, helped with great tact and shrewdness to avert problems and misunderstandings in those first months when half the planners were strangers to the other half, encouraged the Pool to keep at it when it seemed impossible to get a workable plan from artists or musicians, or when the social scientists and teachers couldn't seem to get together. Many members of the Pool shared the PTA leaders' stake as parents in getting this project off the ground, but many other Pool professionals had no children of school age, or lived outside of this particular school district, and did not have that essential awareness of this community which the PTA coordinators provided.

To someone who has not tried such a project, this three-way structure of Pool, School and Community Coordinators may seem cumbersome, but it worked; that is, it got the project going, which neither of the three elements involved could have accomplished alone. These and other schools have used "resource" people from the community from time to time; PTA's and cultural centers like the Rockland Foundation had tried after-school programs of varying scope. But such intensive, structured use of artists, writers, and all kinds of scientists - physical and social - with school children was new.

After the seminars got underway, the PTA coordinators attended evaluation meetings and made continued progress reports to their own PTA units, in addition to arranging an orientation meeting for all parents at the beginning of the project, and a public progress report to the whole community in the spring.

How It Worked: The choice of the general areas for the seminars was made by the Superintendent of Schools, after discussing with the head of the Resources Pool and the PTA Council the possibilities in the community. To be specific, science and writing were chosen for grades 6-9, not only because the school administration felt able students might benefit by working with scientists and writers, but because there happen to be a number of able scientists and writers in Rockland County who were willing to work with children and, in some cases, had already been doing it in the Pool. The school administration also wanted art, social science and music. While the County is rich in both artists and musicians, the Pool was initially dubious about its ability to structure the kind of program the school wanted - and, in fact, it took almost a year to get it going in music.

Due to the relatively recent centralization of the school district, high school classes were much smaller than the classes from grades 9 down, so it was decided for the first year not to try separate high school seminars in writing and science, but a single seminar in "critical thinking" (primarily logic) for the ninth grade, and a social science seminar for older high school students. A seminar in philosophy or humanities, along with "great concepts" or great issues" format, would have been preferable to the Pool, since we had already done this successfully with high school students, but the school administration wanted to use social scientists in a seminar that would be a more direct enrichment of the high school program.

When the planning meetings got under way, it became clear that these seminars couldn't be tied too closely to the curriculum in any subject, and in many cases, the teachers representing the school in the planning felt that it would be a waste of the artists or scientists to try it. Further, from the beginning, the Resources people have felt that they should not impinge on the teachers' responsibility for the curriculum to be covered in the regular school classroom, but adhere to the Pool's original aim of giving children an idea of what it is like to be a scientist or writer, by working on problems or materials that the seminar leader himself was working on or interested in.

On the basis of this year's experience, it would seem extremely important for everyone - school personnel and outside professionals - working on such a project to be clear about these aims. For instance, it creates an obvious problem if either school personnel or outside professionals conceive of the project as an implicit criticism of the school itself, or as an attempt to improve or jack up school curriculum or teaching standards.

A few teachers in South Orangetown seemed to have this idea at first, and were understandably hostile in the early meetings with Pool members as a result. Also, at the first meeting of the art planning committee, a few artists seemed interested in criticizing the teaching of art in the public schools (based on experiences in cities far away, or years ago, and without ever finding out art was taught in this particular school) and unconstructive, if not outright negative, about what they themselves might do as artists working with school children.

If it had not been for the insistence of the art teachers from the South Orangetown schools - that artists could give an extra dimension to their own teaching of the children, and the rising of the artists' coordinator to the challenge by replacing a few of the more negative artists with more constructive ones - the project director would have strongly recommended abandoning the art project then and there. The forbearance of the art teachers with the ignorance and prejudice of a few artists was an example of the kind of determination - a sort of stubborn turning-of-the-other-cheek endurance - that is demanded of everyone concerned in such a project, until the aims are clear to all.

First meetings can be depressing, especially in an era where education has been made a scapegoat for all kinds of national shortcomings, to the disservice of many sensitive and dedicated teachers. In most cases in this project, initial prejudices and hostilities seemed to be dispelled when Pool and teachers got down to the concrete planning of what the artist, or scientist, or lawyer, could do to give a child the reality of scientific research or architecture, or law, that the teacher can't do.

It also creates a problem if either teachers or outside professionals get the impression that the project is merely meant to fill gaps in the regular school curriculum, or to be tied to it too closely. The degree to which such a Resources project can be coordinated with the regular school program is one of the unsolved problems of this project. But to anyone else trying such a venture, the Pool would warn not to start out with very ambitious aims along this line, or both teachers and Pool will be quickly disillusioned.

To be specific again, if a research geophysicist wanted to teach sixth grade science, or high school physics, he would have become an elementary science teacher, or a high school physics teacher, not a research scientist. He doesn't know what the children are supposed to cover in the sixth grade science curriculum, or the high school physics curriculum, and he doesn't have the patience or time to find out in any detail; if he is used to teach the children what the teacher should be covering in class, he may not do it as well as the teacher, and he will be interfering with the teacher's job, and resented with reason. Above all, his own identity and experience as a research scientist, which is what he truly has to offer, will not be used to maximum advantage.

In almost every case, in the Pool, problems occurred when the seminars got too close to the work of the regular classroom. When the art seminar went over buildings from blueprint to final use with the architect; when the social science seminar went over Supreme Court cases with the lawyer as they are argued in court; when the science group did crystal growing experiments with the minerologist, or a problem in oceanography with the Lamont oceanographer, no problems of this sort arose. Closer coordination that would permit teacher and scientist together to guide older students on intensive research projects that could not be done within the span of either the classroom or the Saturday seminar alone, is an objective of this project next year.

But for the seminars themselves, the best thing seems to be for teachers to sit down with the outside professionals and plan roughly the area to be explored, find the best scientist or writer available to do it, and then give him a free hand. Any hint that he has to follow a teacher's "lesson plan" and his enthusiasm quickly cools.

In actual fact we lost a few scientists, social scientists, writers and artists who had previously enjoyed working with school children in the Resources Pool and had done it well, because, in the first planning meetings with school personnel, they got the impression that the spontaneity that had made the Saturday groups exciting was going to be lost, and they would have to follow "lesson plans." We lost a few more later, after a meeting in which a few teachers seemed to consider the writers or scientists as "interlopers" on the teacher's job.

Fortunately, most members of the Pool drew on their own forbearance, when teachers were hostile, because they considered this work with children on Saturday exciting and important. But it would seem unwise for anyone starting such a project to draw too much on such forbearance. The Pool had to let its less patient members withdraw from the project, regardless of their professional stature or ability to inspire the children, because, once such a project is linked to a school system, the ability to work with school personnel is required of all its participants.

Similarly, it would seem that school personnel who do not feel that artists, writers, scientists or others can give anything valuable to the children, should not be asked to work on such a project. For, while the outside professionals who agree to do this work with school children do it because they want to, their main work in their own professions is demanding, and they will not want to give their Saturday mornings to the school children very long if the attendant circumstances become too unpleasant, if too many staff meetings or written reports are asked, or if they are given the idea that their services are resented.

Further, it probably has to be understood that they must do this work in their own way with more freedom than may always be customary in a secondary school; and this can only be justified in terms of state laws and regulations concerning certification of teachers, responsibility for curriculum, etc., by making it perfectly clear that the Resources people are not going to be used as teachers to cover any part of the curriculum, but merely to give children the experience of working with a scientist, artist, or lawyer.

Once this becomes clear - and in this project, it always took at least meeting, and it still wasn't clear to all teachers or Pool members involved at the end of the year - procedures are relatively simple.

What topics within a given area should be covered? In practice, where this is determined in the regular classroom by the demands of the curriculum, in the Resource program it depends on who's available and the problems or material they are working on. In all fields, you find the best people possible - according to the standards of their own profession - and what's covered has to be more or less up to them.

In science, teachers and Pool started out by drawing up a list of subjects that might enrich the science curriculum at various levels: astronomy, for instance, genetics. But in actuality, there aren't any astronomers or genetecists in Rockland County, and there are a great many microbiologists and chemical engineers at Lederle Laboratories, and geologists, geophysicists, geochemists, paleontologists and oceanographers at Lamont Laboratory.

It may not fit in with the curriculum at all for the sixth graders to "study oceanography" or paleontology, but they had to get this unique experience of working with a research scientist from an oceanographer and a paleontologist because these were the best scientists we could find who were willing and able to work with the younger children. And the only way for these Saturday seminars not to put too much a burden on the scientists or others, is to let them choose problems from their own fields.

What's the point in doing this in a school, if it isn't closely related to the curriculum? I can't answer for the teacher, but as a parent involved in this project from the beginning, I have seen more than one child whose spark for discovery was first aroused by Lamont biologist or geophysicist begin to seek all the science, and everything else he could get, at school. If a rather high number of South Orangetown sixth graders have decided to be paleontologists or oceanographers, or newspaper editors, or mystery novelists, one can assume that some, sooner or later, will transfer their excitement to biophysics or astronomy or genetics or communication with Mars.

You couldn't run a school this way, but when your aim with these seminars is not to "teach" oceanography or novel writing or architecture (which can't be taught at sixth, ninth, eleventh grade levels) but simply to give the student the "feel" of what it's like to be a scientist, or writer, or architect, it makes sense. Of course, the child will pick up a few facts about oceanography or architecture on the way, but that's not the point. If the identity of the scientist makes one or two children want to be a scientist, and makes the activity of science more real to the others, that's all perhaps that should be asked.

Why Saturday? The superintendent would have preferred to fit the seminars into the regular school day, despite the scheduling problems this would have entailed for his staff. But most of the Pool commute to New York City, and the scientists can't leave their laboratories in the middle of the afternoon, so Saturday morning it had to be. The children often suggested that the seminars be held from 11 to 2, instead of 10 to 12, but for the scientists and others, Saturday morning sleep was easier to give up than a free Saturday afternoon.

Why two-hour seminars? Because in one hour, once a week, nothing of intensity could be covered. We switched seminar leaders every six weeks last year so that no one writer or scientist would have to take too much time out of his own work. However, we discovered that six weeks is too short to get into anything deeply (~~despite the freedom to do what they wanted~~ (despite the freedom to do what they wanted, every scientist and writer wanted to go very deeply into whatever they did; "if it's superficial, it's a circus, not science," said one). So next year, there will be two units of nine weeks each.

Since the seminars had to be on Saturdays, they were planned to last only for eighteen weeks, from the end of October to spring vacation - in order not to compete with athletics or other fair weather inducements. When blizzards forced the postponement of the last two seminars until after spring vacation, fall-off in attendance was marked.

Why start with sixth grade? The Superintendent and the PTA thought the younger the better, but the Resource scientists, writers and artists were afraid they couldn't handle children much under 12, and many would work only with high school children. On the other hand, the Pool's experience makes one question why programs of this sort are concentrated on the junior and senior year of high school.

The Pool found the work with the sixth to ninth graders enormously rewarding. As Mr. Rist's attendance figures will show, the attendance of the seminars among the sixth, seventh and eighth graders was as high as 98 per cent. It was not that intense in the high school group. Perhaps to start this kind of experience with a child young enough so that whatever spark is kindled will fire his approach to those crucial high school years, makes sense. But few communities can man a Resource Pool large enough to work with every child. Before sixth grade, the child does not have the tools to get as much out of working with a writer or scientist.

How do you find the resources for the Pool? You start by getting together a nucleus of people of proven competence in their own professions who want to do this work. And they recruit their professional peers as needed. Formally, in this project, personnel initially recruited by the Writers' Committee, or the scientists, are approved by the administrative committee, and finally by the Board of Education. The actual recruiting is usually done by the coordinators, or in a new field, by the project director.

Over a period of years, it becomes a chain reaction. Charles Drake, senior scientist at Lamont, joined the project after sitting in for several sessions in 1958 in our first science seminar led by Dr. Robert Menzies, who was then head of Lamont's marine biology research. Dr. Drake's professional competence was known; Dr. Menzies assured us that he "got the concept" of the project, and would be able to work with the children. In later years, Dr. Drake has given such assurance for other Lamont scientists whom he has brought in as needed. Roger Bassett, chemical engineer, at Lederle, performs the same function there. Lately, as the Pool has had to expand rather fast, we try to use a scientist or writer first in a one-shot lecture, so that coordinators for Pool and School can be sure he is able to work with children.

No one has been used in this project whose professional competence in his own field is not already established (i.e., by a professorship in a recognized university, post in a scientific research station, professional reputation based on published works, art exhibits, etc.) Where someone new to the Pool had to be used as a seminar leader, he was asked first to observe one of the other seminars, to meet with the other leaders in the Pool, as well as Pool and School coordinators, and in a few cases, the Superintendent of Schools.

So far, we have found that any scientist or writer or artist or lawyer, who is willing to do this work with children, or teenagers, is able to communicate his own feeling about his work to them. The way he does it varies enormously, and is usually quite different from the approach of the classroom teacher. An editor whose seminar was very successful handled the seventh-eighth graders as if he was sitting at the city desk, and they were his reporters; the Lamont scientists usually treated even the sixth graders like fellow scientists; our "critical thinking" professor taught ninth graders as if they were a college class. The children all preferred "doing things," field trips, problems and projects to "lectures" - but there was a great deal of lecturing in both the "critical thinking" project and the extremely successful seminar on computer mathematics, and it seemed to hold them.

Discipline? The children and teenagers seemed to react to the natural authority of these men, and their respect for their own work, even though this is sometimes different from the teacher's authority. Because the seminar leaders had no experience in handling youngsters, and therefore tended to treat them like adults, the youngsters usually responded in an amazingly adult way, and there were few "discipline" problems. The children's own interest in the seminars has been such that few discipline problems that did arise were handled by a mild warning from the school coordinator that the child would be asked to drop out of the seminar.

Because such problems, when they do occur, not only disrupt the seminar, but are extremely distressing to the leader who may be unused to children, it is well to warn the new scientist or artist in advance that such problems may occur, and do not mean disaster, and should simply be reported to the School or Pool coordinator. There is no need for any child to remain in such a voluntary seminar if he is going to disrupt, but the leaders are usually too soft-hearted to kick them out.

It must be realized that when an outside professional agrees to do this work, he takes it very seriously. Inexperienced with children, he tends to see a discipline problem as evidence of failure. An eminent playwright called the project director in some distress after his first lecture in the high school writing project, which was held in the last two periods of the regular school day, and not on Saturday morning. "I was a flop," he said, "they walked out at the end of the second act." No one had warned him that some of the students had to leave after the first period.

The Pool has also learned that it may take a little time for a new Resource person to find the way to give children the sense of his field. Often, the person who comes in for a "one shot" lecture begs to be asked back because "now I see how I should have done it."

Are the seminar leaders paid? Most of us who started the Pool felt we had to be, at least in token, to insure the permanency of the project. To ask a scientist or writer or artist to give six, or nine or eighteen Saturday mornings to such work, which he takes, or should take, as a serious commitment, and which he must prepare for, and which is often more exhausting than he bargained for - goes beyond the bounds of what even a dedicated citizen volunteers to community activity. They are not paid according to the rates of their own profession, but according to the minimum rate for outside lecturers in local institutions. The paper work is the most burdensome part of such a project, and this is done by the Pool and School coordinators, who are paid for part-time administrative services.

Because the actual clerical work required to run a project of this sort in the school system, and keep experimental records, was beginning to seem too burdensome to both Pool and School coordinators (whose own professional duties did not permit them to give more than part-time services to the Pool, no matter their enthusiasm), next year the Pool will have a full-time secretary.

The feeling one gets after observing this project for several years is that nobody is doing this work for the money. But would they keep on doing as much work as is needed to run the seminars properly if they weren't paid in terms of professional commitment? Once it was decided to pay, everyone has been paid the same fee. But those who give only one or two lectures often donate the check to the Pool.

This money is really needed by some of the younger scientists or writers to justify spending so much time away from their own work. But it doesn't mar the flavor of the project, which is, for the Pool at least, a creative endeavor, a kind of service to the ongoing generation and to one's own creative values, which is strangely satisfying to almost everyone who takes part in it. To this end, Pool coordinators have discovered that our most eminent writers and artists and scientists, whose professional fees are beyond the reach of any local community or school district, are often as willing as their juniors to take part in the Pool.

In three years of the Pool, the services of several hundred more or less eminent practitioners of art, science or profession have been sought. There have been fewer than five refusals. In several cases, a writer, scientist or lawyer, originally dubious, later volunteered his services when he caught the "feel" of the Resources Pool from his child or colleague's participation in it. The fire is greater when any project is new, one is told. But in this project, the devotion of Pool members seems to grow with their degree and length of involvement.

Partly, perhaps, because an institution is being created here, and it is satisfying to create an institution, especially when one sees that wonderfully vivid response of the children, Saturday after Saturday. And partly because it is refreshing to do work that is not compromised by all sorts of organizational maneuvering and politicking, where the freedom of the format permits one to try out an exciting idea, a new approach when one thinks of it.

As director of the Pool, I would be embarrassed to keep on asking these people to do this work year after year, if they were not paid something for it. But the only reason I think they keep on doing it, for this relatively small pay, is that there is something about the challenge and freedom and creativity of this kind of work with children that is deeply satisfying. My own hunch is that perhaps one could cut the pay without destroying the heart of whatever made the Pool work, but if one cut out the spontaneity and the relative autonomy of the Pool which permits it to run itself as a "community of equals," it would no longer work.

How are the children selected? This is the hardest problem in such a project, and will be described later in detail by the school coordinator, who handled the selection process. The criteria were arrived at after much discussion between the members of the Pool and the classroom teachers, and came up again and again for discussion, in the evaluation meetings every six weeks.

It is extremely hard still to know what the criteria should be for selecting students for such a project. If you can't work with all the children -- in this project, the 250 we did work with were approximately 20 per cent of the total school population in those grades -- you should work with those who will benefit most from working with a scientist, artist, state assemblyman or foreign policy maker. Theoretically, you want to work with those who are potentially the most creative, on the assumption that this experience may challenge some of them to want to be scientists or senators; spur them on to the kind of work in which they will realize their potential creativity.

Neither Pool or school wanted to use existing tests by which the academically gifted are chosen, nor to be guided completely by achievement already shown in class. Such an experience, it was felt, might be very valuable for a child who, for one reason or another, had not yet worked and achieved according to his full potential in class. On the other hand, those who already had shown their potential in school achievement, might really be fired to a life's aim by this experience.

Then there was the question of "interest." Somehow, the scientists, writers and others in the Pool have a strong suspicion that where actual creativity is concerned, "interest" - or motivation, purpose - may be more important than potential ability as shown by any test. Some teachers also felt that the children selected for these seminars should be the ones who were really interested in working with an oceanographer or a playwright. On the other hand, at sixth grade, or even twelfth, a student who has no such interest, may have it aroused by such an experience. In the end, Mr. Rist asked the classroom teachers to recommend those students who, according to all these hunches, might benefit most from the seminars. Their careful qualitative comments, quoted later, will give the flavor of the selection process.

Later, as the teachers met with the scientists and others in the evaluation sessions, they had some strong "second guesses" about the selection, as did the Pool. The main "second guess" is to open some door, in such a project, for self-selection: to let the interest of the child himself be a deciding factor in this kind of work, even if he would not otherwise be selected.

But we keep coming back, most of us, to the feeling that if the main point of this project is to help the child find his future identity, his area of potential creativity, there must be a way to bring in children who have not yet found themselves or their "interest" in school, children in whom for any reason the teacher suspects an unrealized creative potential.

One way to prevent regrets and "second guessing" is to let more children share the experience. But when the expected drop-outs did not occur here (of the 250 selected last year, all were interested in actively coming, and attendance stayed near the 90 per cent level, every week till spring vacation) the very size of the seminars (18-20) prevented the intense individual work of the child with scientist or writer that was our aim. Our original plan last year was to include both fifth and sixth graders in the elementary seminars; because of the selection problem, we chose more sixth graders instead.

Next year, the plan is to have two nine-week units in each seminar, and to keep the seminar small, but to repeat it, for a different group, the second semester. This will give some children a chance to attend seminars in several fields instead of one, and many children a nine-week experience of more intensity than the six or even eighteen-weeks can be when the group is too large.

For this kind of project, the scientists and writers object strenuously to groups larger than 15. But it was the observation of the Project Director that even when the group was 18 or 20, the children were getting more than the scientist or artist realized. The quiet ones, who do not participate vigorously in discussions, aren't getting anything out of the seminar, the writer or scientist tends to feel. But the results of later interviews, plus the tests given at the end in critical thinking and computer mathematics because the scientist wanted to know himself if the children got any of it, indicated that some of those quiet ones got it all. Dr. Dorman, in the earlier years of the Resources Pool had led groups of 10 or 12 sixth and seventh graders on a more free-wheeling adventure in science, at the end of which every child had grasped theory of numbers, etc. enough to write a program for the big Lamont computer. He was distressed at the end of this course, during which, because of the size of the group he had, to do a lot of formal lecturing at the blackboard, that only 50% of the group were able to execute a computer program, though 100% were able to solve the problems that tested their understanding of binary arithmetic and number theory.

On the other hand, visiting scientists from IBM who were amazed that children that age should even be given problems of such complexity, would have considered it quite a revelation that all the children were able to understand the theory involved, and half to actually carry out a computer program.

A member of the South Orangetown school board, who visited that seminar one day, also noticed that while one child was working on a computer problem with the scientist at the blackboard, almost all the others were doing it on paper - unsolicited - at their desks.

In the older groups, the seminar leaders were willing to work with larger numbers, at least in the beginning, on the assumption that those who weren't really interested would drop out. While such drop-outs did bring the high school seminars down to the desired size, this did not happen in the younger groups. Part of the explanation of both the spottier attendance and the increase in drop-outs in the high school group seems to be the increased demands and responsibilities older students must meet -- College Boards, part-time jobs, family responsibility when parents are sick, etc.

It also seemed to the seminar leaders that the response was most vivid and eager in the 6th to 9th graders. But while the teenagers are more "cool" in their reactions, the 30-odd who kept coming to "critical thinking" and the social science seminar throughout the eighteen weeks showed an interest that increasingly broke through that "coolness."

In future selection, and for others trying such projects, it would probably be advisable, within limits, to make groups slightly larger than the seminar leaders might prefer, especially in the high school years, but not to exceed 18 or 20.

In the selection, one ought to guard against sex-stereotyping, and in this respect, especially, not to lean too heavily on previous interests. Many more girls than boys were selected for the writing groups, but the few boys who were selected responded so strongly that one wished more boys had had the chance. The fact that only one boy was in the poetry seminar probably mirrors an attitude among high school students that poetry is "for girls," not masculine.

But we have seen in the Pool that boys who worked on poetry with this particular masculine seminar leader found it as "cool" as electronics - and that girls, who are more likely to be chosen or choose writing or art than science, can in these seminars, become interested in science.

In the end, the best guarantee that the children selected for these seminars will get the maximum benefit from them - in awakening new interest and motivation as well as sustaining that which is already there - seems to be the sensitivity of the classroom teacher who is primarily responsible for the selection. But in order for the teachers to do this selection, and to interest the child in attending, or even to permit the child's own interest to guide the selection, the teacher has to know what this experience with the scientist, or the writer, artist, lawyer, is going to be like, and what it may do for the child.

Our experience indicates that the best way to do this is to let one of the scientists, writers, or artists "orient" the teachers himself, and later talk personally to a meeting of children, before the final selection is made. Written descriptions, or even second-hand orientations by the school coordinator do not seem as satisfactory, since this experience is so elusive, and depends so heavily on the identity of the scientist or writer, rather than the material to be covered.

Last year, scientists, writers and others in the Pool took part in such orientation sessions for children and parents, after the initial selection was made, but not in the orientation of teachers before the selection began. Many teachers who became familiar with the project later said that their selection would have been different, if they had known more about it. Of course, after the first year, there is bound to be much less mystery - after children have attended one seminar or have heard about them from friends, they are easily "interested."

Evaluation of Procedures: Joint Pool-School Meetings - "Playing It by Ear."

An essential part of this project, which perhaps was less a drawback than an asset, was its very lack of established procedures, and the need, therefore, to "play it by ear" -- the need to improvise procedures, without knowing how they would work, just to get the project under way in the schools, and often later, when one had a little clearer idea, to change the procedures.

The Resources Pool, having no precedents to draw on, had been improvising all along; in fact, this "playing it by ear" and freedom to improvise was something almost everyone in the Pool thoroughly enjoyed. Mrs. Savell, Governor Rockefeller's assistant, came to her first seminar in the high school prepared to lecture on the various functions of state government, and found herself instead spending most of the time discussing the tugboat strike she had just helped settle. This probably served even better to make government real than her original plan.

In leading these seminars, the scientists especially liked to keep their "outlines" very loose and pursue directions that emerged. In terms of the aim of the project - to give the children an idea of what it's really like to be a scientist: the reality of science, not as dead facts to be learned, but as asking questions where the answers aren't known, discovering something new about the world, so that some may want to be scientists -- this "playing it by ear" serves very well.

As, for instance, "crystal growing" was chosen by Dr.

PRECEDING PAGES MISSING

In practice, the teachers did not, and probably cannot, "tell" the scientists, writers and others what they should do in these Saturday seminars. There is no authority whereby they can tell them this; true, the scientists, writers and others are working with the school children on Saturday only by sufferance of the school authorities, and finally, therefore, of the teachers themselves - but also only by sufferance of the voluntary desire of the outside professionals to do this work with children.

The problem was put neatly in two quotes in an article about the Resources Pool last winter in the publication, "Professional Growth for Principals." The first, by Dr. Paul Woodring, of the Ford Foundation, qualifies the belief that "intellectually gifted men, by serving as guest teachers, can contribute much to the schools," with the warning: "It is not likely that such men will ever want to teach in a self-contained classroom, where they would be required to keep records and take off overshoes.

The second was a diplomatic statement, by Anthony Barone, Principal of the Tappan Zee High School in the South Orangetown School District. "A School can be quite suspicious of new things, you know. That's why it has been essential to involve the staff. As a result of this involvement, our teachers have been with the project right along."

Asked if the "use of citizen teachers hurt morale among the regular teachers," Principal Barone answered, "No. In fact, the Community Resources Pool is actually an encouragement to our teachers."

To put it more bluntly, you can't run such an operation in a school system without a recognition of mutual veto power (scientist or writer can't do anything in the school which the authorities don't want him to; scientist or writer won't work in a school in any way he doesn't want to). And without a mutual interest in making such a project work that makes exercise of such veto power unnecessary, the project almost certainly won't work.

It takes time for everybody concerned to realize this, and to communicate with each other well enough to work these things out. And to accept the nature of the relationship as a "dialogue" between equals, which is the way our Resources Pool has always worked, and the only way, in my opinion, it could work.

In the beginning, in some of the groups, the teachers made few concrete suggestions. It wasn't until they saw in actuality, how a scientist, for instance, could work with the children that they began to see the possibilities in terms of their own work. The Pool had to respect that responsibility good teachers feel for their students - which made them cautious at first in using our resources, and then eager to use these resources in ways they felt would benefit their own students most directly.

Whenever a teacher made a concrete suggestion, Pool coordinators tried to follow it out. As, for instance, when the head of the high school English department urged that larger numbers of the older students be given certain experiences with the writers that could be directly related to the advanced English courses - and that might cement real career interests at this time - the writers' coordinator, Robert Sennish, worked out with him a series bringing playwright, newspaperman, poet, novelist, editor and critic in for lectures at the end of the regular school day.

This could be attended by all interested high school students including those who were attending other seminars, or no seminars on Saturday. When this was judged a success in the high school, though the writers themselves missed the stronger response of the more intimate and smaller Saturday seminars, social science teachers, at the spring evaluation meeting, requested a similar series, using the social scientists, foreign and political experts, to lecture on large conceptual issues: nationalism, colonialism, etc. The Pool was ready to try it right away, even though the project for that year was formally completed, but agreed when the teachers said it should be thought through more carefully, and planned for the following year.

One must point out that the South Orangetown teachers showed a great deal of respect for, and sensitivity to, the different approach of their opposite-number practicing professionals in the different arts and sciences. If a classroom teacher had even suggested that any material or approach was unsuitable for children of that age, the Pool, as a matter of course, would not have used it. No such suggestion was ever made to any member of the Pool at one of these meetings.

When the project director questioned the writers' plan to give seventh and eighth graders Ibsen's "Doll House," and how this compared to what such students were assigned at school, an English teacher said: "You shouldn't be guided by that here. It might inhibit you too much. We'd rather see what you do and get some ideas from it."

This English teacher, after an initial period of reservation about the Saturday seminars, wanted finally a chance to lead one herself - in addition to teaching children her required five days a week. One could only assume that she saw something in this kind of work that disregarded previous assumptions about children's capacity, or lack of it, in the matter of reading and writing - and wanted a chance herself to "improvise" or "play it by ear" with able children more than she had time to do in the regular classroom.

As the Resources project became increasingly real through the actuality of the Saturday seminars, the working relationship of the Pool members with the school teachers also became more real: the initial, polite reserve, which may have masked reservations in some cases, gave way both to frank disagreement, honest expression of differences, and to an increasing, and often unexpected, consensus.

An elementary teacher, who made no bones about her students' "excitement" over the science and writing seminars, frankly dismayed the Pool by pointing out the problem it caused her in class, when she tried to interest the whole sixth grade in a new subject, such as binary numbers or cell structure, which her few top students had already studied, much more intensively, in the Saturday seminars. The Pool began to feel that the real problem might be not to coordinate more closely to the school curriculum, but to steer more carefully away from it. This teacher felt it was merely a matter of timing.

The teachers also urged that they be told in advance about the field trips with the scientists, not only so they could have the Saturday students report on Monday to the whole class (this was regularly done by many of the sixth grade teachers, where only one or two students in a class took part in the Saturday seminars), but so the teachers themselves could go along.

To have called the meetings at the end of each unit "evaluation meetings" was probably a mistake, because the classroom teachers quickly made it clear that they could not "evaluate" these seminars on the basis of their classroom observations of the few children from each class who attended. As mutual information meetings, however, they were undeniably important.

Most of what the teachers learned about the seminars, they learned here, as the scientists, writers and others gave their reports. From these, the teachers proceeded to give the seminar leaders some useful advice and criticism, to clear up problems inadvertently caused by the Pool in class, and to see what, if any, advantage they could make of these seminars in the regular class. Further, the teachers gave the seminar leaders some needed background on children's knowledge and abilities at the different age levels.

Any suspicion that the real point of this project was to "evaluate" the school teachers should have been cleared up by these meetings. Almost to a man, the seminar leaders were amazed at the high level of ability of the students of this district; their capacity for understanding difficult ideas and concepts in science, mathematics, literature and social science; their proficiency with the tools of language and number; their eagerness to grasp and master material the seminar leaders knew was supposed to be beyond their grasp.

With all respect to heredity and family environment (which for the children in these seminars was extremely varied), the Pool could not work with these children so intensively on Saturday without acquiring a great deal of respect for the teachers who taught them every day. Ted Merill, Business Week editor, who had expected to spend most of the six weeks teaching the seventh graders how to put a news story together, was amazed at the clarity of the stories they wrote for him the first session. "I had to raise my sights," he said and went on to give them a rigorous workout in professional newsweriting, editing and photography.

Obviously, he could not have done this, nor perhaps could any of these seminars have been conducted on this level, if the schools themselves had not already done the job of teaching Johnny how to read and write and handle numbers. Even certain members of the Pool, who had been most critical of the public schools and thinking in terms ultimately of private schools for their own children, were gaining a new personal respect and interest in their public school system, as the Saturday seminars progressed through the winter and early spring.

The exhaustion that our high-powered scientists, writers, lawyers and others felt, at the end of the two hours on Saturday, also gave them more respect for the teacher's job.

There seemed to be, by the close of the eighteen-weeks of the seminars in April, a growing feeling of cameraderie between Pool and School, a good feeling of enthusiasm for this mutual enterprise. Teachers and Pool members even felt free to tease each other, and to exchange good-humored insults, as well as compliments. So when a certain writer complained, in better self-criticism, that after six weeks of working with him, only one or two of the sixth graders had written articles anywhere near professional standards, a sixth grade teacher produced some cheering evidence of an unexpected carryover of "professional standards" he had observed in some of those children in their writing in class. There was mutual head-shaking of Pool writers and school teachers over the unfortunate influence of television on the children's literary style.

On the basis of frank criticism from teachers, and their own self-criticism, both the scientists and the social scientists became increasingly aware of the need to focus the seminars on a concrete problem in which the students could take an active part. This was not just a question of lecture-versus-discussion; even the sixth graders were able to take a certain amount of formal lecturing - more than one might have expected - when it was focussed on a problem where they also participated as actors, as in computer math.

On the other hand, even though the anthropology unit was conducted solely through round-table discussion, in which the students participated, both teachers and social scientists felt that the focus was too broad and diffuse, and should have been narrowed to a dimension the students could have explored in more depth. In the later law unit, where the lecture-discussion was focussed on Supreme Court cases, in the intensive re-argument of which major constitutional issues were explored, the approach seemed more workable.

The Publicity Problem.

In the evolution of the Resources Pool project, this common endeavor to find workable procedures and achieve a good working relationship between school teachers and outside professionals was perhaps impeded by what realistically was also one of the major assets of the project -- the very glamor that accrues to the disciplines of writing, science, art, law, when a child gets to work with a real scientist, who has just returned from an expedition in the Arctic Ocean, or a real television producer, off to London next week to interview General Montgomery, an anthropologist who has lived with head-hunters in Borneo, a real world-famous sculptor, a real state assemblyman.

The project, inevitably, got a good deal of publicity. Except for the first local news releases meant to acquaint the community with the aims and objectives of the Pool, the publicity was unsolicited. The interest shown in the project by the New York Times, the Voice of America, the Sunday supplements, professional journals, County Government, Professional Growth for Principals, the NEA, local newspapers in Rockland and Bergen County, and the visits and requests for speakers from PTA units, psychological groups, Teachers' College professors concerned with the education of the gifted, school board members from other communities, and the state commissioners of education, seemed legitimate. This experiment evidently met a need felt by educators and parents in many communities. We could not possibly answer all the requests for "blueprints" on "how to set up such a Pool, with pitfalls and problems to be avoided" - from the West Hartford PTA and the St. Paul, Minn. Council of Arts and Sciences to the Newton, Mass. Teachers' Association and the school administration of Columbus, Ohio. We could let those who had a legitimate reason, observe and make their own report.

Since this was a pilot project, the Pool felt an obligation in this respect, in which the Superintendent of Schools agreed. To a degree, this publicity was good for the project; it made this inevitably strange and suspect intellectual venture familiar, respectable, and even glamorous in the community. It made the values of the "egghead", the commitment to intellectual endeavor, the life of the mind, the identity, individuality, "difference" of artist or scientist, more acceptable, respectable, desirable, to the community and thus, to its children.

But if I were a teacher, I should have felt slightly outraged at all the hoopla, just because a writer or scientist deigned to do, for a few hours, the work with children which a teacher does day in and day out, and for which in recent years, he has been the target of constant public criticism.

Inevitably, the reporters concentrated on the more glamorous aspects of the project, and tended to leave out the role of the school teachers in planning it. At least one reporter did not get the point of the project at all, and wrote about it with conclusions and "lessons" for school teaching that were never intended, and dismayed the Pool even more than they must have dismayed some teachers.

Most members of the Pool have had enough dealings with the press, in their own work, to take such publicity for what it is - a necessary evil of the modern world which, with all the errors and boners, somehow communicates the essential facts. In retrospect, it seems to me still that there would have been more danger in barring reporters and observers, and in trying to keep these seminars "secret." Because eggheads are almost automatically suspect, because this project was new and different and admittedly intellectual in its aims, and because it was being conducted by a minority group of the total community, we felt, without ever really spelling it out, that we had to take certain precautions.

One - and this was spelled out - was to steer clear, in all seminar sessions, of sex, religion or controversial aspects of politics. When the head of the high school science department wanted a unit on "practical politics," since this was a national election year, and there were people in the community who had participated on all levels, from local to national, we made sure that Republican and Democrat had equal time.

Of course, we were not so concerned with these limits (which the Pool set on itself, they were not dictated by the school) that we let them hurt the project. When a question was asked in a seminar, the leader answered it. But he did not answer it in the high school classroom quite as freely as he might have answered it in the college classroom. Realistically, in view of what happened later, one would advise any future Resources Pool in any community to take these precautions.

The second precaution was simply publicity - to use all possible means - orientation meetings of parents and teachers, progress reports to the community, PTA reports, an open door to observers and the press - to let as many people as possible become acquainted with what was actually going on in those classrooms on Saturday. It was the only protection against false rumor.

The glamor, which was both an asset and a liability in the publicity, had to be weighed for what it was, and often deliberately discounted by the Pool. For instance, one of the things the scientists could do to make science come alive for the child that the teacher could not always do, was to take him into the real laboratory - teach him to program that giant computer, and actually execute it on the thinking machine himself; let him hunt for fossils on the cliffs that are the real hunting grounds for the micropaleontologist, geologist. It was hardly surprising that when the scientists polled the children on what they liked best and least, they liked the "field trips" the best, and the lecturing in the class the least. But the scientists did not thereby decide to cut out the duller inside work; if it was all glamorous doing, and no tedious thinking, it wouldn't be science, but a circus, as the Lamont geophysicist said.

The Problem of Evaluation

The problem of evaluating the Resources Pool project, in whole or in part, is more than the story of what happened - (though that is and always will be, a fascinating story, and we ought to tell it some day, straight as it happened, with all the full flavor, and all the good and bad, for the pure enjoyment of it, quite aside from this attempt to soberly evaluate it for other people's use) -- and it is more than what the children liked or didn't like.

In the first place, how can you evaluate such a project except in terms of its own aims? Those aims were simple enough, large enough: perhaps too large for anyone to be sure they were served, or in what degree. But it would be quite wrong to evade that simple, large, real point by trying to evaluate this project in terms that may have been involved incidentally, but were not the real point.

Normally, one could hardly ask those most closely concerned in a project to even try to evaluate it, and yet, we who have been giving so much time to this work want to know, for our own sake and that of others who may be tempted to try something similar, if, what happens to a child, meeting two hours a week with a dedicated scientist, artist, writer, constitutional lawyer, justifies the work involved.

If he learns something that makes him get better grades in his regular school work, that would not justify our work - in fact, it would be almost an accident, as these seminars were run. On the other hand, if some interest awakened here made him approach his school work a little differently, made him more "motivated," made him finally more of a "self-starter" on his own road to identity, the Pool would feel that was a justification.

If an interest awakened here were real enough for him to follow it outside of school hours, where no grades would mark it; if the reality of the scientist or the writer, or the artist, as the child saw it, made him - only one or two of him perhaps -

think he might want to be a scientist, or artist, or senator, and in some rudimentary way, start working toward it, and if this feeling were real enough that he already began to show the essential values of the scientist or artist, or political pioneer, this would be justification, to the Pool. Perhpas you could never show this particular experience was crucial, for this would happen over a period of years and it might have happened anyway. But if, in some cases, it did happen, or started to happen here, the project would have been a success in the eyes of the members of the Pool; they would have passed on their own spark of critical and creative human thought.

We have reason to believe it happened, in some cases. The evidence is only anecdotal. It is vivid and convincing, to one who has observed it. Of course, one would want to know what happens to these children later. One knows that the spark fed on Saturday had already been lit, in school or out, for some children in this project. One would suspect that no spark, kindled in a few hours on Saturday, could have much effect on a life, if not fed later in school or out. On the other hand, once such a spark is truly lit in a child, he will keep on finding fuel for it, in school or out.

Virtually nothing happened, as a result of the Saturday seminars that the teachers were able to pin down in terms of class performance. Most teachers had only one or two students in these seminars; and how those students performed in class must surely be credited to the work of the classroom teacher, not the incidental influence of the Saturday. And yet, some teachers seemed to feel, from the way the students talked about the seminars, that they "got something there they didn't get anywhere else."

How does one pin down what that "something" was? Having observed a little of each seminar, having heard from the children and their parents, what they "got out of it," it seemed to me finally that it was no more, and no less, than the Pool set out to do in the first place. This opinion must be taken for what it is - that of a key participant-observer, who has a heavy responsibility in ascertaining whether writers, scientists, artists and the others are wasting their valuable time in working this way with school children. Later reports of the seminar leaders will show in detail what took place in that time. From my observation of all the seminars, the evaluation meetings, and the children's response, what came through to the child was the essential identity of the scientist, the artist; his commitment, his critical values, and his standard of excellence.

Highlights of the Seminars

In the Writing seminars, what seemed to get through to the children was the respect these writers have for human experience, an idea, and the words that communicate it; and some sense of the passion that makes a writer work. I think they got a feeling for the work of writing.

The intensity with which Sennish discussed a poem, and the values he found in it got across; the way those normally giggling teenagers began to read those poems aloud, the nuances they were able to find in them; the intensity of their own approach to Ibsen's "Doll House," and their grave delight in discussing its philosophic as well as its dramatic values, were lovely to see.

The intensity and delight and respect all the writers in the Pool give to writing and reading was mirrored by the children's intensity and delight and respect in the Saturday seminars, their willingness to read, even more than was asked of them (and some of it demanded a lot - Ibsen, for instance, for a 13-year-old,- and their unsolicited writing.) They wrote even when they weren't asked to, and wanted it criticized. They wanted to write more.

The precision and hard work, the organization of good writing, also came across. To the surprise of some teachers, there wasn't as much difference between writing-as-a-creative-process and writing-as-a-discipline-to-be-taught-and-learned-through-hard-work as those who romanticize writers make out. The English teachers were surprised at the way some of the writers kept sending the children back to write it over again, find a more precise word, outline it first, think about it before you write it down.

At the evaluation meetings, the writers themselves got into some hot arguments with each other over whether too early an insistence on organization, precision, discipline, might stunt the child's creativity. But since no matter how they argued theoretically, all these writers happened to be excellent craftsmen in their own fields, they couldn't work on writing with the children without letting their own high standards of craftsmanship show a bit, and they couldn't help showing that this was work, not play - but work that could be more fun than play.

All the writers went about this differently, but the zeal with which Ted Merrill infected those would-be reporters and photographers was not dissimilar to the zeal of novelist Dorothy Davis' sixth graders in making words tell a story. And the precision with which Eliot Tozer (CBS) made his seventh graders outline their articles first was not too different from the precision of the poet as Professors Sennish and Owens help the children analyze it.

In what way, any of this was different from the good teaching of an English teacher, only such a teacher himself could say, except that here the identity of the writer and the reality of his work came through and gave a new dimension to that precision in the use of words.

The writers' insistence on discipline may have disappointed a few teachers who expected a more romantic and mysterious evocation of the muse. But the notion that writing is hard work - Eliot Tozer's constant admonition, "Before you put the black mark on the white paper, think;" the editorial criticism he and Merrill couldn't refrain from handing out, did not daunt these children. In later interviews, they were disappointed that they weren't asked to do more work, writing.

The gusto of the sixth-graders, interviewing their neighbors or fellow students on the bus for those lively stories, the way the teenagers who worked with Lane Slate or Apstein now look at television, and the poems the seventh and eighth graders wrote for Sennish, seemed to the writers themselves, to justify their work. Whether any of these children will become writers themselves is another story, but Merrill was asked, at the end, by a number of the seventh and eighth graders for job advice.

In the science seminars, what seemed to get across was the scientists' real interest in problems that aren't solved, in finding out new things about the world where the answers aren't known, in discovery. It is almost incomprehensible to this observer that these modest experiences with these real, and therefore modest and almost deliberately understating, deglamorizing scientists, could have had as much impact on the children as they seemed to have. The day-to-day diary of the Lederle microbiologists shows the simple experiments, with microscope, cells, tissue, in the sixth grade seminar. But the impression of fascination, when the sixth graders objected to the cancellation of the seminar on Thanksgiving weekend, was real.

We learned from parents that many of those children wanted microscopes for Christmas. A mother told us that when her son cut his finger, he wouldn't let her put a bandage on until he looked at the blood under the microscope. A child with a stream behind her house has been doing continual "experiments," since the seminar, studying specimens from the stream bed under the microscope. Some parents told us that they are now forbidden to throw away rotten food that can be used for a culture.

One got the impression that these sixth to ninth graders were willing to tackle problems that seem too difficult, to read books one could hardly expect them to understand, to master difficult new techniques in a fantastically short time, once this spark is even slightly fanned.

In fact, observing the eagerness, the delight, almost the hunger, of these rather loosely selected sixth to ninth graders of an ordinary suburban school district, for really difficult problems: their ability to handle the real materials of the field (and this was true, in writing as well as science) at a level that is not considered by educators to be even within the scope of the child, one had the feeling of stumbling on unknown territory - as if all the normas and standards of education may vastly underrate, and understimulate, this spark in children.

In the computer math group, Dr. Dorman set up a difficult problem which he told the children they would have the machine do the next week. "Let's do it ourselves now," a boy said. Dorman said, "Well, if you want to try." The 10-year-old went to the board and went through the complicated routines - to square roots and all -- "We'll have to find a harder problem for the machine," he said.

Another 11-year-old decided, during the Saturday seminars, that he was going to be a paleontologist. Maybe he will, and maybe he won't. But he has already taught the younger children in his neighborhood what the Lamont micropaleontologist taught him about fossils, has organized several minor fossil-hunting expeditions and one major one, where he dragooned his father into a 50-mile trip, retracing the route to the cliff he had started to explore with the scientists.

None of this may be remarkable. None of it may be crucial. It will take some years to see. But having watched, over a three-year period, some of the children who first had such sparks kindled, working with Lamont scientists and others in the Pool's early years, one sees that this first serious interest, once awakened, brings about further experiences to challenge the child on, in school or out, until the critical mass is reached, and there's no stopping him. When the boy or girl is so surely fired to be a scientist, a writer, a doctor, an artist that he makes the things happen that need to happen, himself, then one could be sure the critical mass has been reached in the explosion to identity.

The phrase a parent or teacher often uses, when he observes this happening finally, in one of these gifted children, is that the child seemed to "come alive." I saw this finally happen, in one case, three years after the first experience with the Lamont scientist started what was indeed a kind of chain reaction. The beginning was not even as obvious as the South Orangetown sixth grader's rock collection.

This boy, in fifth grade, tested at the "genius" level on the IQ tests, and had already been skipped a grade by a teacher and principal, who were worried about his increasing boredom and non-aliveness in school, even though he still got top grades in his school work. Though he had been doing long division in his head at 5, and read Mark Twain at 7, his reading was declining to the comic book level; he thought science and arithmetic "dull and boring," and shared his classmates' attitude that a kid who collected rocks was an "oddball."

The first time he came alive, except on the baseball field, was when a Lamont scientist got him going on an experiment in gravity; when he stared at the figures by which he'd charted the fall of metal balls down a flight of stairs and concluded in grave and serious excitement, "if my figures are right, Galileo was wrong."

That boy did not begin right away to collect rocks on his own or do experiments at home, like some of these South Orangetown children did. But the next year, working with Charles Drake, the Lamont geophysist, he decided he was going to be a scientist, probably a physicist -- and his sixth grade teacher took the hint and gave him various projects and experiments in which he built models of atoms, explained them to the class, etc.

The word "oddball" disappeared from his vocabulary, about the same time that he decided that poetry, with Robert Sennish was cooler than electronics. The year he was in the science group with Dr. Arbiter, he was increasingly alive, in school and out. By eighth grade, when he had moved from the jurisdiction of the Resources Pool, he no longer needed it. He was doing his own experiments at home, and after school, in physics and mathematics, with his eighth grade science teacher's help. He put himself on the school newspaper, and the standard of excellence he now pursued, in the subjects of his serious interest at school, were his own. He thought of himself as a scientist, and then, a mathematician, in a matter-of-fact way.

When, through his school, he was given a chance to take the test for the extremely competitive Columbia Science Honors program, he began spending all day Saturday in the university laboratories. He resisted all efforts by his parents to send him off to camp in the summer, and pestered the Columbia mathematicians until they gave him time on their computer, along with the graduate students, to do an experiment in pure mathematics. But the process of "coming alive" -- which exploded into school, and happiness with friends, and these intense and disciplined self-starting projects by the end of the eighth grade -- had begun and been fed progressively by this tenuous work with the men in the Pool on Saturday, leading to new interests fed by his teachers in school, for the three years previous.

It started with the Lamont scientist who let him feel that spark of discovery that "Galileo was wrong," -- and made him want to be a scientist. Judging by that one child alone, it would seem that whatever experience gives that first spark to a child -- from which the commitments, the work, that leads to identity proceed -- is important. That spark was later well-fed indeed in school, but it was only after that spark was lit that he came alive in school.

Several of the South Orangetown students last year decided, as a result of the art seminar, that they wanted to be designers, or architects. They have started their own portfolios; they are taking art in high school, though it is not required for college entrance. One student in that seminar is reported to have "come alive" in her behavior in all classes in school, and in her manner with the other children, after some weeks in the art seminar. This girl, incidentally, was not selected for that seminar because of high grades, but because a teacher and the guidance director suspected she had that spark in her which work with the artists might bring out.

Something less dramatic seemed to happen in the course of the year with some of the teenagers in the high school social science seminar in South Orangetown. There were about 18 of them, to start with. They seemed, in the beginning, to those of us who observed, much less responsive than the 6th to 9th graders -- cynical, "I'm waiting, you show me," passive, inert -- in a word, very unalive.

Of course, they were older: 16, 17, 18. Most of their school life had been spent in an atmosphere where to be "serious," use long words, read big books, "talk like a college professor," was a matter for ridicule -- to be "different" from the other girls, not accepted as one of the boys, not like all the rest.

In their earlier school life, here as in other American communities, the penalties for being an "oddball" were greater, perhaps, than they have been -- since sputnik and the competition for college seats have made academic excellence, at least, respectable. The penalties of being an "oddball" are by no means unique to any given high school in America in recent years; an application of that term to any unusual or serious commitment or interest, is, among this nation's youth, fairly common. This fact is documented in study and after study by sociologists and historians -- the Jacobs report on college students, the observations that led to Riesman's "lonely crowd."

The social science seminar seemed one of the most difficult, and those who led it were continually dissatisfied with their own performance in terms of their objective. In terms of the actuality of social science, its content was hardly explosive: the Pool consciously steered clear of religion, sex, controversial political issues, as has been noted.

An anthropologist led six sessions; then, politics -- an expert on foreign policy, dealing with such matters as the emerging nations of Africa, their problems, the problems of American foreign policy in dealing with them, and some attempt to make use here of insights gained in the anthropology sessions. A joint session of anthropologist and constitutional lawyer on national politics, followed by another session with a young lawyer who had been campaign assistant to Richard Nixon; then state politics - a session with the assistant to Governor Rockefeller, and the young state assemblyman (Republican); then community politics, with a political scientist who is also a local Democratic committeeman.

Next, four sessions with Milton Carrow, a lawyer, who gave them four Supreme Court cases, illustrating basic tenets of the U. S. Constitution, arguing each brief, for their redecision; and finally, two sessions in which they were given the problem of setting up a government for earth colonizers on Venus, in the not too distant era when the population explosion might make such colonization necessary.

Those members of the Pool who led the social science seminars were extremely critical of themselves and each other, because their standards were very high. The social science seminar also became the target for a vicious attack from elements in the community whose mentality might best be described by the fact that, in their eyes, the exercise in rearguing Supreme Court cases was "teaching our kids to overthrow the Supreme Court of the United States."

The actual effect of the social science seminar, despite its diffuseness, dull lectures, etc., was to strengthen, reawaken, or kindle in many of these teenagers the kind of serious respect for the values of democracy, the kind of critical thinking and idealistic vision, and sense of personal responsibility for the government of community and nation that is the opposite of the cynicism or beatnikery, the passive boredom or active negativism that is finally called delinquency, in American youth today.

The anthropologist may have been too diffuse, technically; if he did it again, he would focus on one problem rather than trying to give the high schoolers a bird's eye view of the anthropologist's approach to everything, from the development of man, family, relations of kin and nation, to language and personality. But Dr. Landgraf did convey to them his own genuine vision as an anthropologist, a social scientist -- his own respect and endless interest, questioning, even awe for the variety of man's patterning of his life on this earth.

In that circle in which Dr. Landgraf made the teenagers sit so they would participate in this questioning -- an evolution seemed to take place. The cynical "show me" ones dropped the wisecracks, leaned forward and started talking; the quiet ones started expressing opinions, asking questions; the "cool" kids became heated in argument, critical - and respectful enough, interested enough, to be serious.

The political scientists may have lectured too long, in their desire to give real content to these short hours. But it was very clear, when the students got a chance to ask their own questions of the foreign policy expert, the state assemblyman, that they were becoming increasingly serious, increasingly interested in these questions -- and that, from the simple reality of this state assemblyman not too much older than they, from the reality of the man whose work directly serves the evolving relations between nations, they were acquiring, at the very least, some sense of personal and critical responsibility that will serve them well as citizens of this nation and, at the most, a further kindling of vision that might motivate one or two to become a social scientist, or a senator, or a pioneering politician, or foreign policy maker.

It is hard to pin down this elusive change from passive cynicism to respect, and finally what looked like serious and eager involvement. Could this really have happened simply from eighteen Saturdays of meeting with men and women, who are unashamedly serious in their own involvement with the large problems of government and society? Perhaps this vision was already there in these teenagers - and in other "cool" American kids -- and such an experience with visionary adults merely gives them more courage to express it.

One of the quieter girls said: "I think the main thing that happened is that I began to have more opinions of my own. I found myself asking more questions, not just on Saturday, in school too. And sometimes I didn't think the teacher was right. It made me value my own opinions more." Perhaps it could be important, for a democracy, for 16-year olds to value their own opinions enough to reargue a Supreme Court case.

Whatever these teenagers got from this seminar -- whatever changed their original passivity, cynicism, negativism, some of them valued it enough to come themselves to a School Board meeting, and sit there until 2 A.M., when word got around that hostile members of the community were going "to get" the Resources Pool.

This report is hardly complete without telling the story of this attack.

The Attack and the Community Answer

At various times in the year, we had heard that there was opposition to, or suspicion of, the Pool project in a small segment of the community, and that a rumor was afoot that the project was "communistic" -- or, more specifically, that the Foundation from which the grant had come was "subversive."

I learned about this rumor in the fall, and discussed with the Superintendent of Schools whether we should issue some statement, giving the facts about the New World Foundation and its financial sources. The Superintendent felt that this was not necessary, and that this was simply part of the suspicion that seems to accrue to any educational foundation. The Rockland Foundation, as a cultural center mainly used by the relatively more sophisticated newcomers to the County (professionals, commuters, artists and writers) had always been considered "pink" by some of the older residents of the County.

But this rumor seemed to center specifically around the New World Foundation, which of course was unknown to all but a few professional educators and college professors, in the local community. Perhaps, to those with little familiarity with the nature of educational foundations, it seemed suspicious that anyone should give $13,000 for such a project unless it served a purpose that couldn't be just education. But when we tried to find out the basis for this rumor of Moscow gold, it turned out to be the name --"the 'New World' Foundation sounds subversive."

It was partly my awareness of this unpleasant little rumor that made me insist that all coordinators prepare detailed, written plans for the seminars that could be made public after the Board of Education approved them. Even if this rumor had not existed, when you are doing something new like this that is by definition elusive, it's probably just as well to pin down on paper as much as possible - and to keep everyone informed on its progress. In retrospect, I think now we should have done this not just in the fall, and at the end, in the spring, but more frequently.

When these plans were presented for the school board's approval last fall (the school- and teacher-coordinators made the presentation, with the Pool present to answer any questions that came up) -- this rumored opposition did not materialize. A few weeks later, at the parents' meeting, there were several questions about the Foundation grant, which were answered factually, but nothing of an unpleasant nature. Following this, the head of the PTA Council, accompanied in each case by a member of the Pool - scientist, writer or artist - toured the district, describing the project in full in each PTA unit, and asking for questions.

When the seminars got under way, we more or less stopped worrying about these rumors; the growing enthusiasm of parents, children, as well as the Pool, the evolving working relationship between Pool and School, plus the frequent reports in the local papers about what actually was going on in the project would take care of false rumors, we thought. Unfortunately, neither innocence nor the truth, nor the publication thereof, seems to stop such rumors, if anyone wants to fan them.

The attack did not materialize until two months after the seminars had ended -- with attendance at the 90 per cent level until the end. Parents at our spring progress report meeting to the community had urged that funds be budgeted by the school district to insure continuation of the project the following year. Such funds had been budgeted by the Board of Education and voted upon by the district.

At the cordial final evaluation meetings of seminar leaders and teachers, enthusiastic plans for the following year had been discussed. The project had also been reviewed with encouraging interest by the representatives of the State Commissioner of Education and reviewed again at an enthusiastic meeting of teachers and Pool leaders with the representatives of the New World Foundation. Teachers' suggestions, compiled at a separate meeting of School personnel with the Superintendent at the end of March, had been incorporated into the plan for an expanded project for 1961-62, for which a new grant of $15,000 had been sought, and obtained.

The Pool was taking a breather, before getting to work on this report and final plans for the next year -- and the only activity still going on in the project itself was the concert series, which after a slow start, had finally been organized by the Pool's musicians, and seemed to delight children, teachers, principals, and everyone else who heard them. These affected not just 20 per cent of the children, as had the seminars, but included every child in kindergarten through ninth grade in the district. Enthusiasm for the concerts, which terminated the project, had evidently moved teachers to have children write "thank you" letters to the Pool in class, which the Pool was happy to receive.

Then, the last week in June, rumors suddenly erupted in the community, apparently spread by a small group, that the Pool was teaching the children "sexually immoral and subversive doctrines," that the New World Foundation was "on the Attorney General's list," that we were all "communists" and were teaching the children to be "atheists," and to "overthrow the Supreme Court."

Pretext for the public attack, which took place at a meeting of the Board of Education on June 27, was a letter from a committee of high school teachers, headed by one of the athletic coaches, questioning a confidential progress report made the preceding January by the Project Director to the New World Foundation. (Both the teachers' letter and the progress report are included in full at the end of this report.

Some teachers apparently misunderstood this report as a criticism of their own work, which was not intended. However, since teachers' misunderstandings of this report and of a midwinter magazine article had been met months earlier at meetings called by the Superintendent and School Coordinator, revival now may have been manipulated by those who had other axes to grind against people in the Pool, or the values it symbolized.

The attack, as organized in the community was similar in pattern to other recent attacks on education and intellectual values which have been reported in many parts of the nation. In recent months in Rockland and neighboring counties, there had been a wave of such accusations of "communism" directed against the teachers and teaching in public schools and colleges, and against groups supporting education such as PTAs.

A report of the National Education Association shows a great increase in such attacks during the past year in the U. S. generally.

Teachers who had inadvertently been drawn in because of real questions or misunderstandings about the Pool quickly and publicly disassociated themselves from the element that threatened the "college professors" the night of June 27 with physical violence. That threat wasn't carried out against anyone physically - but one teacher said later: "If this keeps on, next year they'll be threatening us for what we teach in class."

There were aspects to this attack that made it difficult to take at face value. A local politician who spread the "subversive" insinuations about the New World Foundation, claiming to have done "research" about it, later admitted that he knew from this research that the Foundation was not on the Attorney General's list. This same man, the week before the attack, bought a copy of a book called, "Erotica in Literature" in the local bookstore, and showed it around the neighborhood saying, "This is what those people are teaching our children." No leader of any seminar in the Pool had ever used such a book or any book even slightly resembling it, (though it is, of course, a scholarly study and not a "dirty" book.")

One of the targets of the rumor campaign was the "critical thinking" seminar; again, not for the actual content (the principle of logic), but for the title: "Critical Thinking" was said to be an attack on religious doctrines.

Certain background facts may or may not be relevant here. Many members of the Pool have religious beliefs or origins that are minority ones in this community. Some had been outspoken on issues of religious influence in the schools. The Pool, as a whole, is not a group in the usual political, social, or religious sense, its members being variously Protestant, Catholic, Jew, non-religious, Democrat, Republican, members of different country clubs or none, members or non-members of the Rockland Foundation, and a good many non-joiners who take no part in the usual community activities.

But the very values that brought them together in the Pool also make them quite active in the increasingly bitter community battles on educational issues here: school bonds, centralization, school board elections, upgrading of educational standards. These things would probably be true of the kind of people from whom a Resources Pool would be recruited in any community -- and to organize such people as a Pool to work in the public school system probably makes them a target for public attack.

By the Sunday before the School Board meeting, the threats and the passions were so ominous, and the telephones ringing so constantly with alarming new rumors, that public-relation-minded friends of the Pool wanted to use pressures, or even abandon the project, to abort the attack, which we knew by now would take place at the meeting. We held an emergency meeting of Pool Coordinators on Sunday noon, at which I asked if anyone wanted to announce that we wouldn't hold the project in the public school system the next year - to remove ourselves as targets for attack.

No one in the Pool would even consider abandoning the project now, despite the risks involved. Evidently, many parents in the community would not permit it to be abandoned for the same reason, which went far beyond the original intent of the project itself. In the face of this attack, the Pool became a symbol to many of the very values of free thought, of the unhindered pursuit of truth, of human uniqueness and creativity, that we had wanted merely to bring alive for the children - through the identity of the artist and scientist -- but had inadvertently made more alive to those who fear and would destroy those values, and to those who would defend them as the heart of our democratic faith as Americans, and as the heart of human existence.

We decided simply to ask the Board of Education to report -- scientists, writers, artists -- the progress of each seminar, so that people would know what it was that was being attacked; and that whatever accusations were made, we would not lose our tempers, but that we would insist on saying or having the accuser say what exactly had happened. Thus, when the charges of "sexual immorality" were levelled against our anthropologist in a way that could have implied he taught the children anything from free love to mass rape, he insisted on his accusers' spelling out what he was supposed to have said. Under threat of legal action, the accuser had finally to admit that the sexually immoral doctrine was the use of the word "menstruation" before a mixed high school group.

Perhaps we were wrong, but we thought it better to have such charges made in the open where we would be there to answer them, than to have this ominous hidden rumor campaign go on.

Word had spread in the community that various groups were going "to get" the Pool that night. So many citizens attended that school board meeting that it had to be adjourned to the high school auditorium. It went on until after 1 A.M. Very few persons left until it was finished.

Many who came to the meeting were parents of children who had attended the Pool seminars. Many were unknown to the Pool personally, and we were very moved, when in the face of such accusations, so many raised their hands and asked to tell what their children had gotten out of the seminars. These parents seemed to be from all sections of the community, White and Negro, old-timers and new people. Except for four parents who Mr. Rist had included in his report, their presence was unsolicited.

Thanks to the wisdom of the Board of Education, the Pool was permitted to give a full picture of the project before the fireworks began: a short version of the individual reports by seminar leaders which can be seen in Part II here. It might have created too much bitterness and confusion to continue the project and, in addition, done a great disservice to many teachers in the school system, as well as individual members of the Pool, to have reacted in a personal defensive against basically irrelevant charges. As it was, whatever the personal emotions of those who accused, the attack was experienced by many that night in strangely impersonal intensity: as an attack on anthropologist and philosopher who had taught the teenagers critical thinking, on artists who had shown children one kind of creation, and musicians who had shown them another, and scientists who had shared their passion of discovery, and doctor who had taken them to his hospital to watch great surgeons, and professor who had infected them with the passion of poetry and lawyer who had given them the sense that they could solve problems of their own society.

The later charges of "Marxist dialectics" were couched in terms that made one mother say, "This is the way Adolph Hitler started." An appeal to reason was made in simple, moving words by a male South Orangetown educator who left the auditorium crying. A member of the School Board cited the definition of tragedy as the "purgation of pity and terror."

Despite threats of reprisal, the School Board voted renewed support of the project for another year. The PTA Council met in emergency session the following night and wrote letters to each member of the Pool, as well as the teachers, urging that we continue working together on this project.

Even after the specific furor about the Pool died down, many persons who, for the first time, had come to a school board meeting that night, kept going to them. It was as if the attack on the Pool aroused an awareness that vigilance was needed to protect the values the Pool had symbolized, which are, of course, the values of public education.

Conclusion

And so it must be said, to those who gave us this grant, to those who may contemplate starting such a project elsewhere, that it can have unpredictable consequences, to focus the attention of children and community on the values of the scientist, the artist, the social scientist, the seeker of new solutions to problems of society. Those who work on such problems seemed effective in firing the minds of children. In so doing, they were unintentional gadflies for some teachers; and some teachers seemed delighted in terms of their own concern for the children, but other teachers seemed uneasy in terms that made the Pool feel interlopers on the teachers' concern.

Whether it is possible to institutionalize the concept of the Resources Pool, whereby scientist, artist, seeker of social and political truth passes on his identity to children, and to institutionalize it as an adjunct to the public school system is uncertain. We will know better after another year.

But we would say to others, now, that you cannot help children to want to be a scientist, or artist or to solve new problems of society, in a community that laughs at "eggheads" who are "different" or regards them as "communist agents." This project was a success in its own terms, because it did strike the spark of creation in some children, and in doing this, perhaps, it so focussed the attention of the community on the values involved that they were attacked - and were less vulnerable to attack.

In this community now, we would hope that children and their parents are less likely to laugh, more likely to respect and defend those values, for themselves, and others. At least, so it seems this September, as members of the Resources Pool sit down again with South Orangetown teachers, the school board and PTA leaders to plan another year of Saturday seminars for school children.

B. Report of Arnold Rist, School Coordinator, Resources Pool
(Director of Pupil Personnel Services,
South Orangetown District #1)

Overview:

The Community Resources Pool was designed to include those students who had demonstrated ability in a particular area as observed by the classroom teachers and also those students whom the teachers felt had potential ability not yet sparked. The basic means of identification then was by the teacher who had observed the student over a period of time. Standardized achievement test results and standardized scholastic aptitude test results were not used as criteria in the selection.

Following the recommendations of the teachers, the procedures used to assign students to particular sessions varied, according to grade and seminar. For most of the seminars, the number recommended was greater than anticipated and this necessitated changing the pattern of the program. It should be noted that even with changes, fifth grade students could not be accommodated as originally planned, and many students were limited to one six-weeks' seminar.

The specific data concerning each of the seminars follows:

A. Grade 6: Science and Creative Writing

Selection: Teachers of the present sixth graders during the previous year were asked to complete identification forms in the areas of science and creative writing. Following this, the present teachers of these students were asked to make additional recommendations, if they so desired, on the basis of observations during the few weeks in the fall semester. This made it possible for newly-entered students and newly-motivated students to be recommended. Forms #1 and #2 were utilized for this procedure.

Teachers wrote comments on each student. Five of them, listed for illustration purposes were:

Comment #1. (girl)	"High intelligence and imagination. A natural for creative writing seminar if interest can be aroused."
Comment #2. (girl)	"Shows interest in science. Quiet child who might need a project such as this to give impetus to her development into a more extroverted individual. Capable - not a great reader."
Comment #3. (girl)	"When motivated, has written some excellent stories. I feel this child has story-writing ability that the project could develop."

Comment #4. (boy) "Has ability, but lacks interest in doing much of anything. Possibly this project will prod him enough to supply the needed impetus for the fuller releasing of his high potential."

Comment #5. (boy) "What this child may lack in intelligence compared to some other children, he more than compensates for in interest in science. This does not mean the child is inferior intellectually! Does considerable work with microscopes at home with probably little or no guidance. Feel child might well fit into this project and that it will be the push he needs to develop greater confidence in himself."

Some students were recommended for both the science and creative writing seminars. The comments of the teachers aided in evaluating where the child would be placed. Each of the five elementary schools had representatives in each of the seminars and all grade six students recommended were able to participate in at least one six-week session. Some students participated in both science and creative writing seminars.

Orientation: Each of the students selected for participation in the seminars received notification of the opportunity and an invitation for their parents and them to attend an orientation program. (Form #3). A brochure describing the project was also included and a form for the parent's signature, indicating approval or non-approval. The orientation program was conducted by the School Coordinator and members of the Resources Pool Approximately 75 parents attended the meeting.

Attendance: The breakdown of students enrolled, drop-outs and average attendance is shown in Chart I below. It can be seen that the attendance was unusually high in these two seminars.

Chart I

CREATIVE WRITING

	No. Enrolled	Drop-outs	Avg. Attendance
First Session	20	0	95%
Second Session	16	0	92
Third Session	13	0	87

No. attending 3 sessions - 5 No. different students - 23
" " 2 " - 11 " attending both
" " 1 " - 7 science and writing - 4

SCIENCE

	No. Enrolled	Drop-outs	Avg. Attendance
First Session	20	1	95%
Second Session	18	0	94
Third Session	15	0	94

No. attending 3 sessions - 8 No. different students - 28
" " 2 " - 6
" " 1 " 14

Impact on Students and Classrooms: The impact at the sixth grade level varied, but was greater on the individual than on the classroom as a whole. Students reacted to the program in various ways: microscopes were purchased for home use, experiments conducted and additional reading was pursued. Those assigned to only one or two sessions requested that they be permitted to participate in more. Many parents indicated a stimulation on the part of the children as a result of this program.

Direct impact on the classroom as a whole was limited. Difficulty in establishing lines of communication between the classroom teachers and Pool personnel, the fact that perhaps 3 or 4 students from a classroom of 25 participated and the newness of the project undoubtedly affected this aspect of the program. However, some teachers were able to observe the effect on individual students and in some instances teachers used the seminar leaders as "resources people" in the classroom.

It should be noted that one teacher reported that material covered in class had already been presented to several of the class in the seminars. This type of situation presents a delicate thing in terms of motivation for the classroom teacher.

Teacher-Resource Personnel Coordination: Periodic meetings were held throughout the year between the two groups. Discussion centered around such topics as: better coordination and communication; what is effective; what are the reactions to the project; how do you handle situations such as this, etc?

The outgrowth of these meetings have led to constructive recommendations for the coming year's program. Among them are:

- .Extension of the program to include more students
- .Provision for better orientation of the classroom teacher and better communication
- .The development of a handbook of experiences for use as a reference by the school
- .The use of interested parents as helpers on field trips
- .The cutting of seminar time from 2 to 1½ hours
- .Pool and School sharing more information about the students involved.

B. Grades 7 and 8: Science and Creative Writing

Selection: The procedures for the identification of students for the two groups in grades 7 and 8 was the same as used in grade 6. Teachers having taught the students the previous year were requested to complete the identification Forms I and II mentioned previously.

The comments of the teachers again proved extremely helpful in attempting to analyze the characteristics of each student. Six comments are included below for illustration purposes:

Comment #1: (boy)	"'B' student in top group. Knows answers when called on. Volunteers half as much as remainder of the class. Slow developer, might spark; very alert; seems to understand; doesn't always have to make a comment.
Comment #2: (girl)	"Has a lot of self-direction; doesn't do well on written tests; very earnest; a plugger in top group; volunteered to bring in bird cages, follows through."
Comment #3: (girl)	"Tremendous, enthusiastic, below top group."
Comment #4: (boy)	"A sleeper; a heavyset, quiet boy; only volunteered during past week; written work and test marks indicate good potential."
Comment #5: (boy)	"Shows great promise; in the honor group and one of the best writers here."
Comment #6: (girl)	"In general group, but has flair for expressing ideas."

Orientation: The orientation of the 7th and 8th grade students was done by the School Coordinator and a member of the Resources Pool of the particular seminar involved. The number of students recommended necessitated limiting the number of sessions a student could participate in. After each orientation, the students were asked to select the sessions they would prefer. (i.e., the science seminars consisted of different instructors working in different areas such as biological science, oceanography, computer mathematics, etc.) Wherever possible, students were given their first choice.

Parental approval for attending the seminars was obtained in the same manner as for the 6th grade.

Attendance: The breakdown of students enrolled, drop-outs and average daily attendance is shown in Chart II. The attendance was excellent and it was necessary to have four sessions in both seminar areas rather than the three planned originally because of the number of qualified students. Furthermore, several of the seminars were extended two weeks and a special seminar was arranged in science at the request of 8 students to enable them to complete their experimentation.

Chart II; **CREATIVE WRITING**

	No. Enrolled	Drop-outs	Avg. Attendance
First Session	22	0	99%
Second Session	18	1	87
Third Session	13	0	91
Fourth Session	13	0	96

No. attending 3 sessions - 7 No. different students - 47
" " 2 " - 4
" " 1 " - 38

SCIENCE

	No. Enrolled	Drop-outs	Avg. Attendance
First session	23	0	90%
Second session	18	0	95
Third session	15	0	81
Fourth session	19	3	89
	*8	0	88

No. attending 3 sessions - 11 No. different students - 40
" " 2 " - 21
" " 1 " - 8

* special extension of first session for a six-week period.

Impact on Students and Classroom: The impact of the seminars on grades 7 and 8 students was much the same as that in grade 6. From discussions with participants and their parents, individual students responded in various ways - more interest, more reading and research, experimentation and writing. Classroom benefit was derived mainly through using student participants in the seminars as resource people where applicable.

Some of the seminars did not allow for close articulation with the classroom situation.

C. Grade 9: Critical Thinking

The Critical Thinking seminar was, by design, limited to grade 9 students. Only one other seminar (Art) also included 9th grade students, but the Critical Thinking seminar received preference. It is interesting to note that 10 students were recommended for both seminars, but were given only opportunity to enter the Critical Thinking seminar. The procedure for recommendation differed somewhat for this seminar. All teachers of the present 9th grade and all grade 8 teachers of the previous year were given the course outline and asked to recommend students for the course (Form #4).

Teachers were also requested to comment briefly on each student. Six comments are included for illustration purposes:

Comment #1: (boy) "Exhibits in class and outside, a great interest in advanced work."

Comment #2: (boy) "Geared to philosophy, but immature in application."

Comment #3: (girl) "Good analyst."

Comment #4: (boy) "Appears to have a well-developed concept of cause and effect, and an ability to see patterns of organization in physical and mental structures."

Comment #5: "Has possibilities. Bright, alert; needs stimulation."

Comment #6: (girl) "Shows originality, conscientious."

Orientation: The students recommended, 28, were oriented by Dr. Magid, instructor of the seminars. The School Coordinator explained that this seminar was being held specifically for the 9th graders. 27 students signified interest and enrolled for the first six weeks' session. Dr. Magid agreed to begin the course with this large number, although it was felt that drop-outs would be greater in this course because of lack of other seminar possibilities. Attendance Chart III indicates that this prediction was accurate as each succeeding six week session found fewer students enrolled. Thirteen students attended the full eighteen weeks' sessions.

Chart III CRITICAL THINKING

	No. Enrolled	Drop-outs	Avg. Attendance
First session	27	3	85%
Second session	20	5	87
Third session	15	2	85

Impact on Students and Classroom: This particular seminar had no direct counterpart in the school curriculum, but was applicable to any area of scholastic endeavor. After the seminars began, Mr. Barone, High School Principal, arranged for Dr. Magid to speak to the Tappan Zee High School Faculty and explain the course objectives and his progress with the students. At this meeting, the high school mathematics teachers began to see possibilities of coordinating the work in the seminar with that of geometry.

Several meetings with the math teachers were held later in the year toward this objective. The recommendations for next year are given later in the report.

D. Grades 9-12: Art

Selection: Students for the art seminar were recommended by the District art teachers who had taught them in grades 8-11 the preceding year. Form #5 was used for this purpose. Several newly enrolled students in the high school were added and also several talented students previously unable to be scheduled into regular art courses in the school program.

Orientation: The students were oriented for the Art seminar by the Artists' Coordinator of the Community Resources Pool.

Attendance: Chart IV indicates the number enrolled, drop-outs and average attendance. Whenever possible, additional interested pupils accompanied the group on special field trips.

Chart IV: ART

	No. Enrolled	Drop-outs	Avg. Attendance
First session	20	1	94%
Second Session	15	2	64
Third session	15	1	81

Impact on Students and Classroom: The impact of the Art seminar on the students was considerable. The use of extensive field trips gave a wide background of experiences to the participants. Some of the remarks of students were: "Now, I'm sure I want to be an architect," "I never knew there were so many different forms of art," "The artists and sculptors really taught me a lot." "I never realized so much went into planning a building."

The work in this seminar was carried over into the school program through the efforts of Mrs. Lillian Forgacs, school Art coordinator. During an especially arranged period held once a week, Mrs. Forgacs met with the students and guided them in their projects. On occasion, Community Resources personnel were asked to attend these periods to answer specific questions raised by the students. Through these efforts, the work of the art seminar and the school art program were brought closer together.

E. Grades 10-12. Social Studies

Teachers in the Social Studies Department, familiar with the content of the seminars, recommended eligible students whom they had instructed in prior classes (Form VI). Several other students were enrolled by the school coordinator of the program for motivational purposes. This proved effective in one of three such cases.

Orientation: Orientation of the students was made by the School Coordinator and the school Social Science Coordinator.

Attendance: Chart V indicates the number enrolled, drop-outs, and average attendance.

Chart V: **SOCIAL SCIENCE**

	No. Enrolled	Drop-outs	Avg. Attendance
First session	22	2	75%
Second session	15	2	80
Third session	10	0	58

No. attending 3 sessions - 8 No. different students - 18
" " 2 " - 3
" " 1 " 8

The number enrolled in the second and third sessions and the average daily attendance of the third sessions and the average daily attendance of the third session was affected by several factors. College Board examinations, part-time jobs obtained in the late spring, illness, National Merit Examinations and practice and participation in the County Music Program conflicted with the Saturday morning classes.

Impact on students and classroom: Comments from individual students who participated in the sessions indicated interest and enthusiasm on the part of many. The seminar type of approach appealed to a number of students after becoming accustomed to it. Comments by the students included, "It really makes you think;" "It's different because you get first-hand information;" "There's a lot involved in politics;" "Each question has many sides to it."

Because of the nature of some parts of the seminars and the dates of presentation of others, the tie-up between this seminar and the classroom instruction was limited.

Orientation of Parents (Grades 7-12): An evening program was presented for the orientation of the parents of students selected for seminars in grades 7-12. Students participating received parent approval or non-approval forms to be signed and returned to the school. A brochure describing the particular seminar involved was attached to the form.

This orientation program was attended by more than 200 parents. Speakers included Mrs. Betty Friedan, Project Coordinator; Mary Ruth Lund, PTA Council President, Arnold Rist, School Coordinator, and Resource personnel including the coordinators of each seminar area. Following the presentation, which included a history of the growth of the Resources Pool, the nature of each seminar and the identification and selection process, considerable time was devoted to a question-and-answer period.

On March 20, Mr. Barone, the high school principal, invited the parents to a progress report meeting conducted by both teacher coordinators and community resources personnel (Form #VI). At this time, many parents commented on the positive benefits their children had derived from the program. The possibility of seminars for parents was suggested by a member of the audience at this time.

Teacher-Resource Personnel Coordination: At periodic intervals (the end of each six-week period) throughout the year, meetings were held for resource personnel and the teaching staff to exchange ideas and plan for the next sessions. Lack of clarity of goals (as perceived by both groups) limited communication; lack of time and, in some cases, little correlation between the seminar sessions and the school curriculum were factors which affected the coordinating process.

However, on March 23, the four high school coordinators, plus a representative from the Math Department, met with Dr. Michelson Superintendent of Schools, and Arnold Rist, School Coordinator, and prepared the following recommendations for the high school sessions for the coming year:

.Better coordination between teachers and Resource Pool people.
.Begin the program with student needs on the basis of what is done now. The curriculum should be extended in terms of depth to pursue specific content areas.
.Use teachers as resources or as cooperating teachers.
.Provide science seminars for high school students.
.Use more field trips to supplement classwork.
.Develop methods of evaluation.

In the area of Critical Thinking:

- Closer communication and cooperation between teachers and seminar leaders in planning the course and selection of students.
- Copies of material used be provided the teachers.
- One teacher to follow the seminars in order to keep the Math staff alerted to what is happening and how ideas and concepts can be incorporated into the regular program of Math 10.
- Seminars for teachers for inservice training.
- Present the Critical Thinking program in the latter part of grade 9 or early part of grade 10 for Math 10 students.
- A different course for grade 10 next year than this year's course.
- Students should be recommended by the mathematics teachers.
- A course entitled "Great Names" be offered that would deal with persons who have influenced our society.

In the area of Creative Writing:

- The senior high school program be run as a series of lectures integrated with the course of study. While the lectures this year were as successful as possible under the circumstances, there were many weaknesses. Chief among these were the extra work and extra time involved for both teacher and student. There is already so much work to be done on the 10th, 11th, and 12th grade levels that anything not closely connected with the course detracts.
- Students who do extraordinarily good work in the field of writing have an opportunity to work with professional people in this field.
- Tape all seminars and keep in the library for future use.

In the area of Social Science:

- Closer communication between teachers and Resource people in developing the program.
- The content of the seminars should be built on the basic school curriculum and would provide both an extension and refinement of this basic material, (i.e.) enrichment at the 12th grade level for 11th graders rather than enrichment at the college level for 10th grade students.
- Develop ways of utilizing the material covered by the Resources Pool on a broader scale - to expose more pupils.
  - such topics as nationalism, imperialism, colonialism be treated from a conceptual standpoint.
  - develop seminars for grade 10 during the 8th (free) period.
  - in grades 7 and 8, do a detailed study of local and city government for advanced seventh graders and interested ninth graders
  - schedule field trips on Saturday and Sunday.

In the area of Art:

- Closer communication and cooperation between teachers and seminar leaders.
- Better means of communication between pupils-teachers-parents-resources pool members.
- Program for next year:

  A. Objectives
  - enrichment-talented, creative students
  - vocational-professional emphasis
  - appreciation-less talented but interested

  B. Techniques
  - enrichment and vocational seminars as held this year.
  - appreciation through the following procedures:
    - assembly programs (6-8),
    - exhibits of professional, one-man shows
    - a permanent collection of local artists' work, sculpture for the area courts of the high school
    - field trips
  - develop a bibliography from the resources people.

Recommendations of the School Coordinator:

1. The objectives for each session should be more clearly defined and understood by members of the teaching staff and Resource personnel.

2. The responsibilities of the teacher coordinators be defined and time made available for this work.

   a. The remuneration for this work should be increased. For the program to run effectively, much time and effort is needed, including night work and Saturdays.

3. A teacher or administrator coordinator be utilized for the sixth grade seminars. The problems involved in teach participation at this level are different from those at the junior and senior high school levels. This requires a different type of approach to the problems of coordination.

4. Provision be made for more clerical help.

Form I-A

SOUTH ORANGETOWN CENTRAL SCHOOL DISTRICT #1

Date:

Memo:

To :

From:

Re: Identification of Pupils for Pilot Project of Intellectual Resources Pool, South Orangetown Central School District #1.

Dear

One of the most important aspects of any project, which furthers the education of capable and talented pupils, is proper identification. The pilot project is planned for those pupils who have demonstrated ability in the past or/whom the Teacher feels has potential ability, which this type of program will spark.

On the accompanying pages please rank from highest to lowest the names of pupils whom you feel should be able to profit from this program. Identifying characteristics are listed to guide you in your selection. Please feel free to add or delete other characteristics, which you feel are or are not important.

(This memo sent to all teachers, whose students might be recommended for participation in the Resources Pool project)

Form 1-B

INTELLECTUAL RESOURCES POOL
S. O. C. D. #1

1960-61

Creative Writing Talent

The following characteristics are considered to be indicative of children who possess creative writing talent.

1. Can develop a story from its beginning, through the build-up and climax, to an interesting conclusion.
2. Gives a refreshing twist, even to old ideas.
3. Uses only necessary details in telling a story.
4. Keeps the ideas organized within his story.
5. Chooses descriptive words that show perception.
6. Includes important details that other children miss and still gets across the central idea.
7. Enjoys writing stories and poems.
8. Makes the characters seem lifelike - captures the feelings of his characters in writing.

Form 1-C

INTELLECTUAL RESOURCES POOL
S. O. C. D. #1

1960-61

Scientific Talent

The following characteristics are considered to be indicative of children who possess scientific talent.

1. Expresses himself clearly and accurately either through writing or speaking.
2. Reads one to two years ahead of his class.
3. Can do arithmetic one to two years ahead of his class.
4. Has good motor coordination, especially eye-hand coordination. Can do fine, precise manipulation.
5. Is willing to spend time beyond the ordinary assignments or schedule on things that are of interest to him.
6. Is not easily discouraged by failure of experiments or projects.
7. Wants to know the causes and reasons for things.
8. Spends much of his time on special projects of his own, such as making collections, constructing a radio, making a telescope or learning a foreign language.
9. Reads a good deal in scientific literature and finds satisfaction in thinking about and discussing scientific affairs.

Form II

To: Elementary Principals
From: Arnold Rist, Co-ordinator
Re: Community Resources Pool

The following pupils have been recommended for participation in the Intellectual Resources seminars in (subject).

Would you have your grade 6 teachers write comments concerning the ability of each pupil listed below. The attached information sheet gives the type of material to be presented in the seminars. The first six weeks will deal with: (subject matter for each seminar listed).

Teachers should evaluate as carefully as possible the specific strengths which a pupil possesses in this subject, (...characteristics listed that appeared on Form 1-B and 1-C). The grade 6 teachers should recommend additional pupils if they desire.

Special attention: 5th grade teachers should recommend "extremely capable" pupils on the same basis as above. These pupils may have an opportunity to participate.

Form III

SOUTH ORANGETOWN CENTRAL DISTRICT #1
Community Resources Seminars

Dear

Your son/daughter____________has been selected to participate in a group of seminars sponsored by the South Orangetown Central School District #1 and the Community Resources Pool. Selection has been made by teacher and guidance personnel based on the ability, achievement and interest of the pupil.

The content of the seminars has been worked out comparatively by teachers and members of the Resources Pool. The seminars will be held at Tappan Zee High School on Saturdays from 9:50 A.M. until 12:00 noon. Parents are responsible for providing transportation for their children for these seminars. A copy of the content of the seminar for which your child has been selected is attached for your information. The information below the dotted line is to be completed by you and returned by the pupil to the homeroom teacher.

Both parents, if possible, are requested to attend with their child an orientation meeting on Saturday, October 29, at 1:00 P.M. Any questions will be answered by calling El 9-3320.

- Arnold Rist, Coordinator

Please complete, sign, tear off and return to school.

Name______________________________ School____________________
Address____________________________ Tele No.__________________
Seminar____________________________ Dates______________________
Desire my child to attend Yes No (circle one)
Will attend the orientation meeting on Saturday, Oct. 29 at 1 P.M. at the Tappan Zee High School Yes No. (circle one)

Form IV

To: Grade 8 Teachers (1959-60) and Grade 9 Teachers (1960-61)
From: A. Rist, Coordinator

Please list the names of pupils you feel would benefit from the program listed below. It is planned to offer this program to present Grade 9 pupils only. Any qualifying remarks on a pupil you recommend would be helpful. Please sign at the bottom.

"Critical Thinking" - Henry M. Magid, Associate Professor of Philosophy, the City College, New York.

The aim of this series of lecture-workshop meetings is to develop in the more able student an understanding of the meaning of critical thinking, and an appreciation of some of the methods that have been developed to achieve clarity and precision in thought.

The work will be divided into three 6-meeting series with the following main topics:

I. The analysis of fallacies in the use of language, propaganda devices; kinds of meaning, use of symbolism, definitions, the informal analysis of argument.
II. The techniques of deductive logic, traditional and modern.
III. The techniques of induction and scientific method.

The materials used for analysis will be drawn from the current press, textbooks and scientific literature. An attempt will be made to devote some portion of each meeting to the analysis of materials brought in by the students. The instruction will be pitched at the high school level.

Name	Address

Form V

INTELLECTUAL RESOURCES POOL
S. O. C. D. #1

1960-61
Creative Artistic Talent

The following characteristics are considered to be indicative of children who possess creative artistic talent.

1. Draws a variety of things (not just jets or horses or people).
2. Puts depth into pictures, plans pictures, and uses good proportion.
3. Takes art work seriously. Seems to find satisfaction in it.
4. Shows originality. Draws things in ways no other children do.
5. Is willing to try out new materials and experiences.
6. Fills extra time with drawing and painting activities.
7. Uses art to express his experiences, his own feelings.
8. Is interested in other people's art work. Can appreciate, criticize and learn from others' work.

Form VI

SOCIAL SCIENCE
Sample
Outline of Seminars

1. Anthropology - The most generalized of the social sciences.
John L. Landgraf, New York University (coordinator)

Nov. 5 - Anthropology, science, and social sciences.
12 - Physical anthropology: the geography and biology of man.
19 - Anthropology and psychology: socialization, personality and culture. Dr. Theodore Abel, psychologist
Dec. 3 - Anthropology and language study
10 - Anthropological views of economics, politics, and sociology. Dr. Sloan Wayland, sociologist, Teachers College, Columbia University.
17 - Anthropology and history: archeology and culture history.

2. Political Science - Political organization and behavior.
John Kraft, Isabelle Savell, James K. Anderson

Jan. 7 - The national political scene, John Kraft, political survey analyst, New York.
14 - (continued)
21 - The state political scene, Isabelle Savelle, Governor's Office, Albany
28 - (continued)
(rest of program outlined in this manner followed).

Form VII

SOUTH ORANGETOWN CENTRAL SCHOOL DISTRICT #1
TAPPAN ZEE HIGH SCHOOL
Orangeburg, N. Y.

March 9, 1961

Community interest has been shown in the Saturday morning seminars conducted by the Resources Pool during the current year. Because of this interest, a public informational meeting will be held on Monday evening, March 20, at 8:30 P.M. in the Cafeteria of Tappan Zee High School.

School administrators, seminar leaders and members of the school teaching staff will discuss the progress of the program to date.

You are cordially invited to attend.

Sincerely yours,

(signed) A. G. Barone, Principal

AGB/vp

PART II: THE SATURDAY SEMINARS

A. Scientists' Report

The Science Seminars were led by:

- Dr. Nathaniel Arbiter, Minerologist, Columbia School of Mines
- P. R. Bassett, Chemical Engineer, Lederle Laboratories
- Dr. Charles Drake, Geophysicist, Lamont Geological Observatory
- Dr. James Dorman, Seismologist, Lamont Geological Observatory
- Donald Reihard, Process Engineer, Lederle Laboratories
- Dr. William Layton, Pathologist, Lederle Laboratories
- Dr. Allan Be, Micropaleontologist, Lamont Geological Observatory
- Ben Ward, Electronics Engineer
- James Brune, Seismologist, Lamont Geological Observatory
- Sumner Kaufman, Engineer, Lederle Laboratories
- Dr. Donald Tapley, Professor of Medicine, College of Physicians, Columbia University

Teachers from the South Orangetown District #1 schools who helped plan the science seminars were:

- Theodore Eiben
- Michael McGrath
- Clarence Branch
- Robert Stein
- Missy Tanaka
- Joseph Schleimer
- Andrew Kolesar
- Raymond Call

Coordinators of the Science Project were:

- Dr. Nathaniel Arbiter, Resources Pool
- P. R. Bassett, Resources Pool
- Theodore Eiben, School

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A. Report of P. R. Bassett, (Lederle Laboratories), Science Coordinator, Elementary Grades.

The science seminars for the sixth grade group included, in the first six-week session:

Microbiology - P. R. Bassett and D. G. Reihard, seminar leaders.

in the second session:

Computer Mathematics - Dr. J. Dorman, seminar leader.

in the third session:

Oceanography - Dr. Charles Drake, seminar leader.

The groups consisted of 15-20 children, both boys and girls, some of whom were in all three sessions. The reports of the individual leaders of these groups are attached and give further details and individual comments on their respective sessions.

A measure of the response to the program was obtained from the teachers in evaluation meetings held following each six-week session. At these meetings teachers and seminar leaders discussed the program thoroughly and many new ideas were offered and recommendations made. Also, as a result of these meetings and of the program itself, teacher interest grew rapidly and made evident the need for better communications and liaison between the teachers and the seminar leaders.

The teachers, in eliciting information from the children who participated in the program, received mostly favorable comments. These followed the general pattern that the classes were fun and the field trips particularly interesting. The only adverse remarks reported from the children were along the lines that some of the subjects did not interest them. On the part of the teachers themselves, there was considerable criticism of the project, particularly at the first two evaluation meetings, when the teachers did not yet have an entirely clear understanding of the purposes of the project. Time was spent clarifying objectives and explaining the whole program. In the final evaluation meeting, the teachers present were more sympathetic.

One of the more important criticisms was made by a teacher who cited a case in her class where she felt that the science program had interfered with her science teaching. The three or four science seminar students, who were also the top students and leaders in her class, had claimed to have learned all about cells and their structure in their Saturday seminars when this subject came up in class. The teacher felt that this undermined her attempts to interest the rest of the class in this subject. This further points up the need for better communications concerning the program, so that the teachers will know ahead of time what subject matter is being covered and to what extent. In this way, it would be possible for the teachers to utilize this extra-curricular effort to complement her regular classroom teaching.

Among the recommendations made by the teachers, the most significant were:

1. A more representative selection of pupils should be used in the future. The current selection took only the top students from each class. (The seminar leaders agreed to this and expressed the feeling that this had been our aim from the start).
2. More students should be included in the courses if at all possible.
3. The field trips should be planned ahead with the teachers' knowledge, so that they can go along on some of them if they wish. (The seminar leaders also agree that this is a good idea.)
4. The teachers should be told of the material to be covered (or that which has been covered) in the seminars so that they can make use of this in planning their classroom science work.
5. The students should be asked what their preferences are before the teachers' choices for each seminar are made.

These suggestions were all endorsed by the seminar leaders as being worthwhile and it is hoped that they will be adopted in next year's program.

It was also suggested that the teachers might be brought into the program to help in the planning and teaching of the courses. There are some cases where this might work out, but in general, we felt that it would place an extra burden on the regular teachers and in some ways defeat the purpose of bringing in outside scientists.

Another source of informational feedback was through Arnold Rist, Director of Pupil Personnel for the school and the one person who represented the school administration throughout the project. His contacts with pupils, parents, teachers and seminar leaders were invaluable in the overall evaluation of the program. He acted as the school coordinating center and, in my opinion, fulfilled a critical function in the project.

The seminar leaders gained a certain feeling of the success of their efforts from all of these above-mentioned sources, as well as from the actual seminar experience itself. There was no doubt in the minds of the science seminar leaders that the program was a tremendous success. Enthusiasm of the students was high. Attendance was outstanding. The objectives of the project were achieved to a remarkable extent and it was felt that the children who participated in the science program actually gained a very valuable experience.

The recommendations of the seminar leaders for next year's program are:

1. The size of the groups should be reduced to ten or twelve for the best results.
2. The individual weekly meetings for each course should be extended from six to eight or nine weeks.
3. The teachers should be informed about subject matter, field trips, and anything else that might help them utilize the seminars in their own teaching.
4. A different group of children should be selected for each course and the selection should be based on the children's own interests wherever possible.

1. Seminar Leaders: P. R. Bassett, D. G. Reihard,
(Chemical Engineers, Lederle Laboratories,
American Cyanimid Corporation)

This report is a diary of the six-week seminar sessions in Microbiology as presented to the sixth grade group.

First Session - November 5, 1960

Mr. Reihard spoke on the history and background of the field of microbiology. Mr. Bassett gave brief instructions on the use of the microscope. Microscopes were passed out (one to each two or three children) and slides of yeast cells from fermenting cider were observed.

The children were quiet and well-behaved (typical first session response). They responded moderately well to the talk and discussion. They showed real care and interest in microscope handling and were very anxious to see more slides.

Second Session - November 12, 1960

Mr. Bassett spoke on the differences between molds, yeasts, and bacteria, plus other general background information on microorganisms, and more on the use of the microscopes. This was followed by microscope work on molds and yeasts, slide making and plate exposure (hands, coughing, etc.)

The students were responsive, well-behaved, and began to show a more relaxed enthusiasm and seem to enjoy the work thoroughly. Things became a little confused near the end of the session as they moved around to observe each other's slides.

Third Session - November 19, 1960

Mr. Reihard spoke to the group on protozoa, algae, etc. Mr. Bassett set up the projection microscope in a nearby room and slides of living protozoa were observed on the screen. This was followed by a period of general microscope exploration in groups of two and three. Algae, protozoa, yeasts and molds were observed. Another set of agar plates were exposed.

This was another good session. Most of the time the children listened carefully, and the atmosphere was relaxed and enthusiastic. When it was announced that there would be no session the next Saturday due to Thanksgiving weekend, there were several comments expressing disappointment. When it was explained that the school couldn't be used that weekend because the heat would be turned off, a boy said, "We could keep our coats on."

Fourth Session - December 3, 1960

Mr. Reihard spoke for most of the session, but brought the group into the discussion and worked out an elaborate dough-baking project in which all the students participated. Mr. Bassett briefly demonstrated the agar plates which had been exposed in the previous sessions.

The purpose of this session was to give an example of experiment design and execution. There were signs of restlessness, but the students seemed to enjoy the session anyway.

Fifth Session - December 10, 1960

Mr. Bassett spoke on sterility and sterile technique. Following the talk, the group was split in two and tests conducted separately with each group using agar plates and various chemical disinfectants. Microscope work followed. Bacteria and molds were observed. Stained slides were made.

This session started off very well, but became somewhat disorganized as some of the students were left unsupervised for part of the time (while the disinfectant tests were being made). Although interest in the microscope work continued to be high, there were more signs of restlessness. The group seemed to be too large to handle when only one person was available to run things. They did remain responsive to suggestions, however, and three of them volunteered to stay at the end of the session to help clean up the room.

Sixth Session - December 17, 1960

Mr. Reihard spoke to the group while the movie projector was being set up to show a Lederle film, "Operation Health," which ended the six weeks of sessions on Microbiology.

2. Seminar Leader: Dr. James Dorman, (Seismologist, Lamont Geological Observatory)

Computer Mathematics, Sixth Grade: Under this title, our group found out how familiar mathematical classroom concepts can be organized by careful reasoning into computing systems which are useful in unfamiliar ways. With regard to computing machines, the necessity of certain logical elements and the basic simplicity of the logical design of the computer were stressed. Efforts were made to encourage everyone to get into the class discussions. Also, some work on non-decimal arithmetic systems proved to be interesting to those who might not always think that arithmetic is fun. On a trip to the computing laboratory at Lamont Observatory, the group solved a simple problem on the computer, using a program which was written in class.

For several reasons, it was necessary to rely quite heavily on the results of a quiz given on the last day in order to evaluate the success of the sessions. First, the large size of the group made it difficult to get to know individuals. Second, due to the nature of the subject matter, lack of laboratory props except for chalk and blackboard tended to make the atmosphere more formal in such a large group.

On the average, the response to the quiz was about 50% on questions involving simple concepts in computer programming and about 90% on problems in non-decimal arithmetic. Some of the people who had seemed to participate very little in discussions were among those who gave the best answers. The subject matter, while simple, was such that no one could have been expected to answer any of the questions before the first meeting.

The quiz made an interesting meeting and more questions were added to the original list by popular demand. From the results, a few seemed to have absorbed almost every important point that was made, but there were some disappointments too. Classroom interest seemed good; discipline was never a problem. Attendance throughout the sessions was surprisingly good, less than one absence per week in a group of 19.

In contrast with the group of the preceeding year with only 7 people, it was more difficult to sustain and manage an intelligent discussion without more formal rules than were necessary in the smaller group. Unquestionably, more good per individual can be accomplished in a smaller group. This fact must be weighed against the idea of exposing a great number of people to this kind of program. I would have been happy with a group of about half size (less than 10), providing the "weeding out" process could have selected only those who would benefit most.

Even though there are points against smaller classes or longer terms, one suggestion which could easily be followed would make it possible to accomplish more in a limited amount of time with a large group. A brief profile of each pupil written by his teacher would indicate the main abilities, interests and classroom personality of the individual, making it easier to understand and work with them.

B. Report of Nathaniel Arbiter, (Minerologist, Columbia School of Mines), Science Coordinator, Upper Grades.

The following evaluation of the Saturday morning Science project at the South Orangetown Junior-Senior High School is based principally on discussions held among a group consisting of Messrs. Layton, Be, Brune, Wayland and Arbiter (representing the Pool), and Messrs. Eiben, Stein and others of the South Orangetown Schools. The subjects considered were chiefly the effect of the Saturday morning classes on the students involved, and means for improving the programs based on the experience gained during the past year.

The broad possibilities, which motivated the Science program in the first place, were agreed to be the following:

1. Exposure of students to professionals in science areas, and communication of enthusiasm thereby.
2. Career guidance, in which students become fully cognizant of characteristics of different branches of science.
3. Education in narrower areas of science to a greater intensity than is possible in the regular school curriculum.
4. For students not necessarily interested in science as a career, an exposure to the type of rigorous thinking and experiment characteristic of science.

With respect to the specific effect of the programs on the students, it was agreed that this might be found directly in the school, might be reflected in a continued interest in some of the subjects outside of school, or might not be evident until some later date. Neither the project instructors nor the Orangetown school representatives could report any clear evidence for strong stimulation of the students. Because of the lack of objectivity of this type of evaluation, it was suggested that some form of questioning be submitted both to the students involved and to their parents and science teachers.

Several very definite suggestions were made for improving the programs, some originating from students who took part and others from the project personnel. There was a strong indication that field trips, possibly alternating with classroom sessions were desirable. It was felt that these should involve activity on the part of the student, rather than passive onlooking. In this connection, there was general agreement that the character of science as an activity must be communicated. In many cases, there is the sense that students require entertaining, and that this is to be avoided.

There was general agreement that the sessions were too few in number on any one subject to have a significant effect on the student. While recognizing the difficulty in reducing the number of courses, it was felt that the most worth while objective would be to have a larger influence on a smaller number of students, rather than the reverse. A suggestion of a similar nature was that the classes were uniformly too large. This made it difficult, if not impossible, for the instructors to get to know the children and particularly to see the effect, if any of the work on the children.

It was strongly recommended as well that there was need for close cooperation between the teachers in the science department of the Orangetown school and those connected with the project. This should include participation and selection of students for the projects, as well as participation by the regular school teachers in the project work. This latter aspect was felt to be particularly important. It was recognized that not all of the science teachers might be willing or able to take part. On the other hand, those who could would add substantial value. Of particular importance, too, is the fact that science project work requires more time than can be spent on Saturday in a formal way. Use of the school laboratory facilities and participation by the school science teachers would permit the efficient organization of continuing science projects. This past year, for example, there was no indication that the Saturday morning projects had any direct effect on student participation in the Rockland County Science Fair.

One subject that requires further discussion and evaluation is the readiness and interest of students at the junior high school level in the physical sciences as opposed to the biological sciences. There is some indication that the biological sciences may be more stimulating to this age student, whereas the physical sciences require somewhat more maturity.

On the whole, it was believed that the students should be more carefully selected for the science projects on the basis of some indication of real interest in advance, even if this means smaller classes, and that the classes should be carried out to give something of real value to a smaller number, rather than to interest larger numbers superficially.

Attached are specific comments from some of the instructors and responses to a questionnaire in one of the classes.

1. **Seminar leader:** **Charles Drake,**
Senior Scientist, Geophysics and Oceanography,
Lamont Geological Observatory, (Columbia University)

Evaluation of Science Seminar (As Compared to Previous Seminars Conducted for the Resources Pool on the Out-of-School Basis).

I do not feel that this year's effort was as successful as those of previous years for two reasons:

a. The six weeks' session is too short. In previous years, it ran twelve weeks, which gave each member of the group ample time to work on a project at home. Some of these experiments, especially biological ones, were barely off the ground in six weeks. This year, we had no projects on account of the limited time; this is a great loss.

Another problem with a six-week session is that one tends to give more superficial coverage to a subject. The kids get a chance to see something, but then we move along to something else, and I'm not always sure they understood it clearly. Perhaps this is my fault and I should try to cover less.

b. The size of the class is too big. Ideally, I would like to have a stationwagon full, because it gives you great freedom of action. If the weather is good, it is easy to go out on a field trip; if bad, you can stay around the school.

As far as the kids are concerned, they would much rather see things than hear words. This is understandable and right, since we can provide them with glimpses of activities and phenomena which they cannot get at school. There must be a balance, however, or you're running a circus. Last year, I would alternate trips to Lamont or elsewhere with sessions in which we discussed what we were going to see or what we had seen, and this worked quite well.

Personally, I enjoyed the program as run informally and independently much more than the present system and have the feeling that my enthusiasm will decline as the square of the amount of administrative activity goes on.

2. **Seminar Leader:** **Dr. William Layton,**
Pathologist, Lederle Laboratories,
American Cyanimid Company, Inc.

Comments of seminar conducted on Biology-Paleontology, Grades 7-9.

A. My Comments.

1. The course was too short. It should consist of at least

ten seminar sessions.

2. The organization of the material presented was somewhat haphazard, which in part was due to my point 1.

3. For field trips in biology or geology, it was too early in the season.

4. The group was somewhat large.

5. There was not enough time for projects.

B. Students' Comments (based on conversation and a questionnaire.)

1. Not enough field trips* - too many lectures.

2. Too short; they don't mind the program running as long as school is in session.

3. Not enough live material was presented. (A good part of this due to early season).

* There were two field trips -- four lectures.

C. Suggestion for future courses

1. Increase number of sessions per course.

2. Alternate lecture-demonstrations with field trips. It should be possible to combine two or three groups in one field trip, i.e., oceanography, geology, biology.

3. Have two instructors per group, with a maximum enrollment (before drop-out) of 15 per group.

4. Field trip program should be planned well in advance. The amount of formal planning for lecture-demonstration material should be up to the individual instructors.

5. The students should select projects to work on at home during the course (as in the old days).

6. The aims of these courses should be decided on and clearly stated.

B. Writers' Report

The Creative Writing Seminars were led by:

- Dr. Robert Sennish, Professor of Humanities, State University of New York
- Lane Slate, Television Writer and Producer, CBS
- Eliot Tozer, News and Public Affairs, CBS
- Dorothy Salisbury Davis, Novelist
- Dr. William Owens, Novelist and Director of the Summer Session, Columbia University
- Theodore Apstein, Playwright
- Daniel Dodson, Writer, Columbia University
- Irwin Unger, Foreign Correspondent
- James Collier, Free-Lance Writer
- Theodore Merrill, Editor, Business Week

Teachers from the South Orangetown District #1 schools who helped plan the Creative Writing seminars were:

- William Moran
- Mrs. Esther Recknagel
- Mrs. Louise Chaize
- Mrs Phyllis Anwar
- Margaret Suczy

Coordinators of the Writing Project were:

- Dr. Robert Sennish, Resources Pool
- William Moran, School

A. Report of Dr. Robert Sennish, (Professor of Humanities, State University of New York), Writers' Coordinator.

The Writing Committee, consisting of members of the Community Resources Pool and English teachers in the local school system, offered a series of seminars which were designed to increase the student's awareness of the rich and exacting relationship that exists between words and the stuff they deal with: objects, ideas, and events. Under the supervision of professional writers, scholars, and critics, the children read and then interpreted what they had read, wrote and then discussed what they had written. The plan for each seminar originated in meetings at which members of the Pool and School were present; thus the possibility of conflict between seminars and a student's regular studies in English was eliminated and the opportunity for enrichment of those studies was literally written into the program.

Students attending the seminars were recommended by teachers on the basis of past performance: both ability and interest in reading and writing. The size of each seminar was limited to a maximum of fifteen students. Attendance was voluntary, the classroom atmosphere informal. Writing done outside class was commented upon, but ungraded, and under the guidance of people who make their living with words, the approach to the matter at hand - whether a poem, a story, a play - was at once disciplined and critical.

It is hard enough to evaluate the success of an academic course in English in which the class meets several times a week over a semester, formal assignments are made, and grades are given. But to evaluate the success of the project presently under consideration is even harder, for one must rely entirely upon the immediate reactions of the children involved, their teachers, and the seminar leaders themselves.

It should be noted here that these reactions ranged from neutral, at worst, to very enthusiastic. But it would be unrealistic to predict with confidence that even the most enthusiastic student would turn to writing five or ten years from now as a career. And it would be equally unrealistic to assume that the impact of the program was negligible, that the students were frivolous and regarded the seminars as a lark or as a status-symbol, or as a way of getting out of Saturday morning chores, for even to the casual observer, certain facts stand out.

For one thing, the method of selection made failure of the program difficult, if not impossible. The seminars consisted of students who were already predisposed to reading and writing. Thus the seminar classroom differed significantly from the academic classroom, in which some students may like to read very much, but are inhibited by the presence of other students for whom literature is hard or irrelevant or vaguely sissified. In a community of openly enthusiastic readers, the seminar student felt no need to edit an opinion or to withhold it on pain of finding himself with no date for that week's basketball game. The student knew that his/her opinion would at least receive polite consideration or, hopefully, produce still more discussion.

The function of the seminar leader, therefore, differed significantly from that of the academic teacher, who must often motivate a child to be interested in reading and writing. The job of the seminar leader was to discipline and deepen an interest that was already there. And because each seminar leader was selected for his proven competence in the topic or genre of the seminar he would lead, there is every reason to believe that these professional people did their jobs well.

The size of the seminars, which ranged from ten to fifteen students, made it possible for each student to have his say, and for the seminar leader to know each student individually. Classroom discipline was no problem - the size of the seminars again a factor. Another factor was the instinctive courtesy and respect the children felt for college professors and established writers who were taking the time to talk to them about writing. Since none of the seminar leaders had had much or any experience in teaching adolescent students, they wisely avoided teaching techniques and were, instead, completely themselves -- people who liked what they were talking about, and, as the students were quick to detect, knew about it as well (although more than one seminar leader later confessed to bad nerves on entering the classroom for the first time).

The students' acceptance of one another, together with their respect for the seminar leader and the smallness of size of each seminar, made for an informal atmosphere in which ideas were exchanged in the free and easy way that characterizes good conversation among people who like one another and have something in common. The combination of informal atmosphere with formal discussion fascinated the children and, in most cases, kept them coming back for more. At the first session led by the present writer, a young lady raised her hand and asked permission to use the labatory. It was explained to her that permission was not necessary, that students could come and go as they pleased. After this incident, nobody went. In fact, many students made a point of telling the seminar leaders that what they liked most was being treated "in a grown-up way."

And they must have liked the seminars for attendance, which was voluntary, was very good. Bad weather, transportation troubles, and conflict of Saturday morning interests made little difference to most students. Since no academic credit was given for the program, a child completed the seminars with nothing more than the personal satisfaction of having learned something and liked it. In the light of this, the attendance figures may be counted as evidence of the program's success.

Meetings of teachers and seminar leaders were held after each six-week session. Seminar leaders gave detailed reports of the material they had covered, the reactions of the students, and their own impressions. The teachers were then invited to make suggestions as to how the program might be improved and to report on what effect, if any, the program seemed to have on children in their classes. Understandably enough, the suggestions of the teachers who brought vast experience to working with adolescent students, were very helpful to seminar leaders, who brought little or none. As for the effect of the program, the teachers' reactions were mixed: some saw great good in the program, some saw little effect at all. None saw bad.

The task of program evaluation by teachers was complicated by the fact that few teachers had more than three of their own students in the seminars and many had only one or two, seminar students having been selected from many classes. How much one or two students will take away from a specialized Saturday morning seminar and convert into subject matter amenable to the tastes and enthusiasms of twenty-five classmates who knew nothing of the seminars, is difficult to measure.

Some teachers, however, did notice in some seminar students a heightened interest in reading and writing along with a greater willingness to talk about these things in class. One sixth-grade teacher gave special assignments to her seminar students that dovetailed with the work being done in the seminar. One ninth-grade teacher, who had seminar students in her class and who took great interest in the program from its outset, undertook to have her students in the regular classroom put together a book of poems, each student contributing at least one poem, and scored an impressive success. The seminar leader for poetry, the present writer, was pleased to receive a copy of the book of poems which the teacher had earmarked for him and which contained a pleasant personal note.

The reactions of the seminar leaders to the students ranged from enthusiastic to very enthusiastic. All found the level of intelligence, maturity and interest much higher than they had expected. All made personal sacrifices of their own time and creative labors, but none was sorry to do it. Since none had ever before worked significantly with children of this age, all regarded the seminars as a personal challenge and were very glad to share with these young people the pleasure and meaning which they, as professional craftsmen, had found in the literary form under discussion.

The program was available to those children in grades six through nine, who really liked to read and write. (For the special program for high school students, see below). It was divided into two levels, one for sixth graders, the other for seventh and eighth graders. At each level, there was a Saturday sequence of 18 seminars evenly spaced over the school year. The reports of the seminar leaders who led the sessions follow.

1. Seminar Leader: Robert B. Sennish, Writers' Coordinator.
(Professor of Humanities, State University of New York.)

The group first read, enjoyed, analyzed, and evaluated poems; then it wrote some. Reading was systematic, and students analyzed, step-by-step, the sense of a poem along with its rime, meter, tone, and imagery, before arriving at a critical understanding of what the poem "means." Discussions were aimed to show the student that reading for meaning and reading for pleasure often amount to the same thing, and that while Plato's "divine madness" might be one cause of poems, human intelligence and hard work are others.

In the first meeting, two poems - one good, one bad, and both written in praise of God and nature - were discussed. Students were quick to see that: although the sense of both poems was roughly the same, the one (God's Grandeur, by Gerard Manly Hopkins) was artistically successful and the other, (Trees, by Joyce Kilmer) was not. Thus the means of a poem, rather than its sense or inspiration or end, became the basis for all meetings. The discussion of the poems in question was followed by another discussion in which students wondered whether a reader who was personally out of sympathy with the contents of a certain poem could read the poem and enjoy it; whether, for example, a non-religious reader would be handicapped in his approach to a religious poem (or conversely, as one student suggested, a religious reader might be over-equipped in his). Much animated talk produced the consensus that an artistic experience was probably non-sectarian, and that how a poet and his reader might hit it off apart from the poem mattered less than how successfully the poet, as artist, handled his materials.

In the second meeting, students read a poem without rime or rhythm, (Ezra Pound's A Station at the Metro) and were able to see how the controlled interplay of rich and evocative images could produce a complete poem in two short lines. By way of contrast, they then read Robert Frost's Stopping by Woods and systematically discussed its easy meter and complicated rime scheme, its graceful story and subdued tone, its several levels of meaning promoted by simple language, narrative lapses, and repetitions. The group was strangely awed by Frost's tricky rime scheme, and the remaining skeptics were now convinced that if poets were dreamers, they were also planners.

In the third meeting, a discussion of A. E. Housman's poem With Rue My Heart Is Laden lasted the full two hours; hyphens alone produced plenty of talk.

Although the fourth meeting again took up only one poem, Frost's Fire and Ice, the group spent most of the time deploring the "cleverness" of the poet. The seminar leader reluctantly concludes that the poem was over the heads of the youngsters, for it assumes a familiarity with love and hate on the part of the reader. It does not excite or explore these passions, and the students were probably too young for even a nodding acquaintance with love and hate. Thus the poem's statement, both elegant and blunt, struck them as merely clever.

The group's discussion of Edna St. Vincent Millay's poem Recuerdo in the fifth meeting was instinctively friendly and formally critical: they liked the poem and, by citing formal elements, were able to say why. In its repetition of refrain they saw an echo of the old ballad, which they mentioned again in connection with the poem's broken narrative; they praised the economy with which the poet revealed character; and they saw the rapid succession of image and counter-image as promoting a tone of breathless expectation which was consistent, they said, with the sense of the poem, the extravagant joy of being young and alive and riding a ferry. A side-discussion produced the reassuring information that none of the students saw the incident described in the poem as a way of life; all saw it as a lark. From this, one may conclude that, at lease where ferry-riding is concerned, the younger generation has its feet on the ground.

In the sixth meeting and part of the seventh, the most difficult poem so far was taken up (W. H. Auden's mock-ballad, As I Walked Out One Evening). With little guidance from the seminar leader, the students remarked how the sense of the poem, the absurdity of young love, was formally matched by absurdity in imagery:

> "I'll love you, dear, I'll love you
> Till China and Africa meet
> Till the river jumps over the mountain
> And the salmon sing in the street."

and how snatches of nursery rhymes, biblical allusions, repetitions, and discontinuous narrative all combined to make a poem that reflected the imperfection of life while, as poetry, being perfection itself. The remainder of the seventh meeting was devoted to a discussion of the poet's function (indeed his possibility at all) in contemporary society and to the student reaction to the writing seminars. The group hoped that both the poet and the seminars would survive.

The eight meeting was concerned with a few passages from the work of Allen Ginsberg, whose poems are filled with the language that adolescent children speak. Ginsberg amused the students; his windy poems contained some fresh air and his Whitmanesque itemizations left them convinced that the man loved to talk. The consensus, however, was that his desire to shock was immature and that, although he showed promise, he was not to be taken very seriously. Nor to be taken seriously, they said, was what followed: jazz played in the background to some determined readings of poems by Ginsberg and Frost. In this, they found great confusion and little art.

Throughout the eight-week period, students handed in poems to the seminar leader, who commented on some of them in class and went over them all in private conferences. Examples are attached hereto.

Here are a few of the verses written in the Poetry Seminar:

Poetry

What is Poetry,
But the wonders of the earth
From one man's death
To the other man's birth?

What is poetry,
But a beautiful sound
From the endless space,
Or the sunbaked ground?

What is poetry,
But the earth and its glory,
A star from the heavens,
A wish from a story?

Nothing else is poetry
And nothing else can be,
Being poetry is nothing
But the earth's sheer beauty.

-Warren Silberstein, 11½

They were dancing when I walked in
It was early, so I sat down in an empty booth
And watched them as they danced and talked in low tones.
They danced as the hours slipped by
Stopping only to put another nickel in the machine,
And I wished each dance was the last.
The crowd dwindled until at last there was only me and them.
They were still dancing when I left.

-Deborah Toan, 14

A barren, wasted land, piles upon piles of sand,
A solitary figure walking alone
Trying to find the way back home.

Left in the desert alone and forlorn,
When he died, would people mourn?
What would they think of this lonely man
Who died alone amidst the sand?

-Christine Grubert, 12

2. Seminar Leader: Lane Slate,
(Television writer, producer, poet)

It was Mr. Slate's initial plan that his group would follow an actual television play through its idea, scripting, pre-production work, and finished half-hour. The show itself was to have been shot at nearby Bedford Village by Mr. Slate and his associates on location, and a field trip during the production was scheduled. What happened to this plan gave the children a concrete notion of how things are in videoland; the show never came off. The sponsor withdrew his commitment, the advertising agency wrote the whole thing off, Mr. Slate and his associates eventually turned to greener pastures (see below), and the seminar wobbled manfully ahead.

Mr. Slate's hope was to expose the group, step-by-step, to the making of a television drama and to show them that effective techniques and competent technicians can nevertheless produce a completely mediocre show (if the price is right). Although Mr. Slate's series fell through (at last reports, Bedford Village is still standing), the seminar nevertheless carried out the plan, using a simulated drama, instead of an actual one. It is easy enough to like Leonard Bernstein, the seminar leader pointed out, but a careful scrutiny of television techniques would help children to bring to their own home-viewing certain critical and technical perceptions that, hopefully, would result in their searching out only good television fare, which certain of them may even want someday to write.

In the first meeting, the group discussed television as a medium, exploring on the one hand its great potential, and, on the other, why it is so bad. Considered, among other things, were sponsors, advertising agencies, time limits, costs of production, and mass taste. A discussion of this kind, which shattered nearly all of television's paraphernalia except the picture tube itself, might have angered some children saddened others. These children were delighted.

In the second meeting, Mr. Slate urged the group to come up with an "idea" for a television drama, pointing out, one by one, that most of the ideas were inconsistent with the whims of a sponsor, advertising taboos, and the like. When, at last, a "safe" idea for a mystery was accepted, the group turned to outlining of scenes and script-writing.

The third meeting consisted of a bus ride through neighboring towns in which abandoned houses were examined and their pictorial possibilities explored. On location, Mr. Slate discussed sets, camera work, and the numberous problems that filming of this kind involves.

In the fourth meeting, the group took a field trip to the New York studios of the American Broadcasting Company, where Mr. Slate was privileged to take the group on a private tour which included control rooms, studios, a script conference, and casual meetings with actors. The consensus of the group was that the morning had been both interesting and noisy.

In the fifth meeting, Mr. Slate ran kinescopes of several television plays which reflected many of the techniques, shams, and potentialities of the medium which, for these children, would never be the same.

The sixth meeting was not held because Mr. Slate and his associates were suddenly assigned by CBS to produce a series of interviews running from America's Jacqueline Kennedy to Britain's General Montgomery, which is called "Accent" and is still running. Though disappointed at the cancellation of the last seminar, the children, hardened by now to the facts of videolife, were not surprised.

3. Seminar Leader: Eliot Tozer,
(Press Representative, CBS TV Network,
Free Lance Writer.)

In this sequence for sixth grade pupils, Mr. Tozer's aim was to give an insight into sound communications techniques with specific reference to the magazine article. To this end, he lectured his students, encouraged questions, led discussions, and then joined them in writing an article.

In the first meeting, his group discussed the philosophy of communication: what is the communicator trying to accomplish? They went on to compare different kinds of communication - poetry, the drama, stories, the dance (which came as news to the students and sent the discussion off on a fruitful and amusing tangent), and non-fiction.

In the second meeting, they considered the reader's interests, his health, wealth, and happiness, and his desire to know and understand, and a method of developing ideas that was not scatter-shot, but disciplined and clearcut. In light of this discussion, several ideas were proposed for a teenage magazine. Mr. Tozer's problem was to convince the students that the hard work of writing could be a source of great pleasure to the reader and (here was the catch) to the writer as well. From the attendance figures for Mr. Tozer's group, one may conclude that he convinced them. The students kept coming back for more hard work and, hopefully, more pleasure.

In the third meeting, the group discussed creativity, the writer's responsibility and the structure of a good article -- the lead, background information, development, climax, and conclusion.

The fourth meeting was divided into two sections. Because the students knew by now that they needed more information about the subject on which they were writing - rock-and-roll - the group discussed interview techniques and made up a list of questions. They then interviewed an eminent musicologist, Professor William Gettel, of the City College of New York. Somewhat awed by Professor Gettel's title and profession and more than somewhat surprised by the information he possessed, the students nonetheless asked good questions (musical antecedents for rock-and-roll, its relationship to jazz and to the ballad, its social scene, its value as music) and got answers that gave them a basis for the article to follow.

In the fifth meeting, the group reviewed techniques of article structure; then all wrote a lead for a proposed article.

In the final meeting, with Mr. Tozer's help, the students finished the article they had started outside class and wrote another in its entirety.

Questioned, students said they would have preferred to do more writing, that they would have been willing to do homework, and that they would have liked to do more interviews. Mr. Tozer's reaction was that, despite the student's enjoyment of the course and their appreciation of his efforts, the sixth grade might be too early to try to teach the complexities of good organization; children were sometimes unable to see the relationship between ideas, except in two or three notable cases. He felt that the twelve hours was time well spent, by students and teacher alike, but that it might have been better spent with an older group of students.

4. Seminar Leader: Mrs. Dorothy Salisbury Davis, (Novelist)

Any creative writing done in Mrs. Davis' sixth-grade seminar was a by-product of the meetings and, reports Mrs. Davis, intendedly so. While she did not set out to violate the hard-won achievements of the students in spelling, grammar, and composition, neither did she propose to interfere with the traditional, tested, and professional teaching of the use of these essential tools of communication.

She hoped that her group might, and she thinks they did, establish that using words can be fun, that making people smile at something said or written, or to be sad because a sad story is told well, is a very rewarding experience.

Much of the time was spent in what the seminar leader refers to as "sort of spontaneous combustion," with Mrs. Davis setting up what might be called dead words and the children providing live ones:

Hers	Theirs
Walk slowly (Make it sinister)	Dawdle, poke, crawl, tip-toe, creep, sneak

And from such beginnings, they often improvised a scene, rarely a whole story. Whole stories, says Mrs. Davis, tended to bog the group down or to thrust them into the rehashing of a bad television play.

The children worked primarily on words and situations that would call into play each of the five senses. On one occasion, (blindfolded, so that it had to be discovered from the smell, feel, and sound) they described the contents of a tin of oatmeal, pine needles, and buttons.

They worked on "stories" about a storm or about a journey at night. Always they looked to how it might be made more exciting by appealing to the imagination with words depicting the sound or smell of, say, a night or a storm. They put together words that told of what they might have eaten afterwards (usually juicy rare hamburgers with relish, onions, tomatoes, catsup.)

Not a child of the 14 did not like to write. Some wrote little, but could respond aloud imaginatively. In time, they were holding more and more of some imagined scene long enough to get it down on paper. This, says Mrs. Davis, she considers writing. She goes on in her comments:

> Best of all they liked to work from the seemingly ridiculous, making up a story about, say, a squirrel, a thimble and a boot, and a woman's hat. I remember one last line very well:
>
> "After that she put her fifteen-dollar hat on her fifteen-cent head and went home."
>
> If I'd worn a hat I might have done the same thing.

5. Seminar Leader: William A. Owens,
(Professor of English, Columbia University, Novelist)

Mr. Owens' sequence of seminars moved by poetic form from the simple and familiar to the complex and powerful, with his sixth-graders. In his first meeting, he discussed jingles and street rhymes with the children, pointing out that meter and rime often sharpened the point of this or that selection and made the reciting of it both easier and more fun. Students were fascinated to consider that what kept a child jumping rope, for example, was probably a combination of lots of energy and the metrically perfect street-rhyme that was chanted while the jumper jumped.

In the second meeting, the group took up the folk ballad (on which the seminar leader, incidentally, has written extensively) and discussed its form - the ballad stanza, the refrain, the repetition of images, the question-answer device - as well as the causes of its popularity. Lord Randall and Barbara Allen were read closely and followed by discussions in which the students were able to see that the impact of a ballad was due less to the good luck of the anonymous writer than to his skillful and affecting use of certain conventions.

At the opening of the third meeting, Mr. Owens was delighted to find on his desk a very competent and completely unsolicited imitation of Lord Randall done by one of his twelve-year-olds. From this, it seems safe to conclude that the attention-span of these youngsters ran not just from 10 to 12 on Saturday morning, but from Saturday to Saturday. Mr. Owens then took up the literary ballad, using Coleridge's long and tortuous poem, The Rime of the Ancient Mariner, as a specimen. It would be hard to say who was the more affected by the ballad - Coleridge's wedding-guest or Owens' adolescents. Some boys took it upon themselves to memorize passages which they would then recite con brio.

The fourth, fifth, and sixth meetings were devoted to a study of the lyric, the sonnet, and free verse, in that order. Mr. Owens carefully selected several lyrics which he felt reflected the historical development of the form, ending this section with a poem by Robert Frost, who, as all of the children were quick to point out, was travelling in perfectly good company in Washington at the time. It was fashionably held by one precocious young thing, however, that "the seventeenth century lyric is still the best."

Although Mr. Owens' discussion of the sonnet was technical, the children were fascinated to see how the form kept repeating itself, with certain variations, among such poets as Shakespeare, Milton, Wordsworth, and Millay. It is the feeling of Mr. Owens that an interest in poetry for the children in his group was not only instinctive, which perhaps goes without saying, but almost formal, which comes with good reading.

He found the final seminar, the one on free verse, the least successful. In it, he dealt largely with image and symbol and, although the children were often able to trace the development of a symbol that had been isolated by Mr. Owens, they were seldom able to see the relationship between the first symbol and another symbol with its development. In Whitman's poem, When Lilacs Last in the Dooryard Bloomed, the symbolic passage on the funeral train was truly meaningful to them, but the interpenetration of this symbol with the two other major ones that the poem contains, was lost on many. (What was difficult and inconclusive for Mr. Owens' 12-year-olds - image and symbol - was challenging and rewarding, though also difficult, for Mr. Sennish's junior high group, some age 15, the difference of three years being crucial.)

Mr. Owens' seminar, which he described as "great fun," meant a good deal both to the children for whom poetry was nothing new and to those for whom it was. One child, whose father works in a local box factory, appeared in class one day proudly bearing a battered volume of early twentieth century verse. Her father had found it at the factory among a truckload of incoming waste paper. The girl was pleased that her father had passed the book on to her, and so was Mr. Owens.

6. Seminar Leader: Theodore Merrill,
(Editor, Business Week)

It was the local English teachers who felt that the assistance of a journeyman newswriter would be valuable in their efforts to establish a weekly newspaper for the new high school, and to this end, the seminar on newspaper and magazine writing for seventh and eighth graders addressed itself.

In the first two meetings, Mr. Merrill defined the areas of journalism, touching upon the differences between newspapers and magazines, the inclusiveness of publications (from business organs to faddist pulp), the mechanics of starting a publication and making it work, along with such matters as the relationship of advertisements to editorial policy, the cost of publication, and the responsibilities of editors and staff. After these two lectures, students no longer saw the world of journalism occupied by a few chain-smoking characters named Scoop; it became populous.

In the third meeting, Mr. Merrill and his students did an intense examination of how a magazine article is put together with staff correspondents. Taken up were the jobs of the men in the field, the function of the illustrator, the demands of the home office editor, the role of re-write men, and then the process of putting the article into proof and the mechanics of fitting it to the space alloted.

In the fourth meeting, the group discussed what kind of newspaper they would like to put out. Everything from a business organ to a racing form was suggested, and a facsimile school paper was finally settled upon. Mr. Merrill made the assignments: news articles, features, photography, lay-out, space, re-write - all departments were covered.

In the fifth meeting, the copy began to come in, and Mr. Merrill was in the unhappy editorial position of not having to make news but of wondering how to edit or get rid of it. Discussions of what to include and what to cut were class-wide, and students learned that the distinction between an important item and a newsworthy one was sometimes hard to make.

But make them they did, and in the sixth meeting, preliminary lay-out conferences were held, with some students, while others roamed the halls of the high school in search of human-interest stories in this seminar or that, or of a seminar leader's face that might make an excellent, if somewhat harried, subject for the candid camera.

The dummy issue of a school edition was processed and completed in the final meetings of the group. Mr. Merrill was pleased by the fact that in almost no case were the grammar or mechanics or writing impediments to his lectures and discussions of news-writing. He was more than pleased by the students' willingness and ability to assume responsibility for the jobs assigned them and by their determination to do the jobs with alacrity and care.

7. Seminar Leaders: Daniel Dodson,
(Professor, Comparative Literature, Columbia)
Theodore Apstein,
(Playwright, Broadway and Television)

Since the seminars of Messrs. Sennish and Merrill ran concurrently for eight weeks, four more meetings would now fill out the eighteen originally scheduled; two of these were led by Mr. Dodson, two by Mr. Apstein.

Mr. Dodson decided to do an intense examination of two modern but contrasting plays: Ibsen's Doll's House, as a specimen of the well-made play, and William's Glass Menagerie, as a mixture of realism and fantasy. After his first meeting with the students, Mr. Dodson called the writing group coordinator to say that he found the meeting very exciting, the whole idea of the seminars an excellent one, and the students "astonishingly sophisticated." Like the other seminar leaders, he had found no need to talk down to the students and was sure that most were quite capable of doing college freshman work. Or the two plays offered, Ibsen's was the greater success, perhaps because Nora's story is somewhat more of a success than Laura's. Students discussed feminism with objectivity and understanding, and in no case was their approach to the play crippled by gossip or subjective reminiscence. They found Glass Menagerie both "sweet" and "sad" but, ironically enough, also "irrelevant" and "unimportant." They preferred the Ibsen girl.

Mr. Apstein's two meetings began with a lecture on the problems and techniques of scene-writing and ended with a discussion of some of the brief sketches handed in by his group. Among the elements discussed were dialogue, motivation, scene-climax, verisimilitude, and movement and arrangement of characters. Students learned that conflict and contrast between characters occurred not merely because one was tall and the other short, say, but because the dialogue had been carefully designed to reveal character and advance plot and move people around, while at the same time remaining dialogue - a medium of communication.

It would be absurd to think that two meetings in scene-writing are going to produce a golden age in American drama some twenty years from now. It is reasonable to believe, however, that from Mr. Apstein's lucid and stimulating exposition of the problems of scene-writing, these young people will take a new critical attitude to the next play they see, as well as a new respect for its author.

8. High School Program

At the suggestion of Mr. William Moran, Chairman of the Tappan Zee High School English Department, a series of weekly seminars for high school students was set up and held during the week. Students who were at a point where an interest in writing might possibly become a career were excused from classes to attend lectures from accomplished scholars and craftsmen.

Attendance at these meetings was much spottier and the response generally less enthusiastic than in the Saturday morning seminars. Its only moderate success might be attributed to its late start, and the accompanying competition in the spring of Regents' exams, class rings, proms, and the possibility that older students are reluctant to show their enthusiasm while younger ones are reluctant not to. It was pleasant, however, to hear from Mr. Moran that the program was more successful that it sometimes appeared to be, although several of the lecturers refused to be convinced of this good news. Following is a description of the lectures:

1. An analysis of the relationship between poet and society in 5th Century Athens and 20th Century America, plus a look at Eliot's Love Song of J. Alfred Prufrock. Mr. Sennish
2. Discussion of Aristotle's Poetics, the development of tragedy, and the new drama. Mr. Dodson
3. Discussion of Arthur Miller's Death of a Salesman. Mr. Dodson.
4. Discussion of his TV adaptation of the Jean Anouilh play, Of Time Remembered. Mr. Apstein
5. Discussion of the mechanics, troubles, and glories of submitting copy from abroad. Mr. Irwin Unger, Foreign Correspondent.
6. Exposition of how formula-writing is done for Readers' Digest, Pageant, Playboy, and others. Mr. James Collier, Free-lance writer

C. Social Scientists' Report

The Social Science seminars were led by:

- Dr. John Landgraf, Anthropologist, New York University
- James Anderson, Political Scientist, Columbia School of Business
- Mrs. Isabelle Savell, Assistant to Governor Rockefeller
- Dr. Arthur Woodward, Psychiatrist, Rockland State Hospital
- Dr. William Diebold, Economist, Council on Foreign Relations
- Joseph Nowicki, New York State Assemblyman
- Milton Carrow, Attorney
- David Colwell, Attorney

Teachers from the South Orangetown District #1 schools who helped plan the Social Science seminars were:

- Mrs. Florence Bloom
- Ben Mendelsohn
- Robert Dillon
- John Lick
- Joseph Masucci
- Robert McMann
- Robert Moylan

Coordinators of the Social Science Project were:

- Dr. John Landgraf, Resources Pool
- Mrs. Florence Bloom, Teacher-Coordinator

A. Report of Dr. John Landgraf, Social Science Coordinator
(Anthropologist, New York University)

Initial plans for the Social Science seminar in the Community Resources plan had to take into account the particular nature of the subject (or subjects) in a public school system. Traditionally, this curriculum has been under constant attack by varying groups in many communities, and traditionally, the response has been to follow a State lesson plan which dealt largely with American history and government, with some small ventures into world history and economics.

An explicit objective of the 1960-61 Social Science seminar was not to deal with subjects in the school curriculum, but to expose the students to working social scientists whose material was barely or not at all dealt with in regular classes. To this end, an anthropologist, the writer, was appointed as coordinator, and the first year's program started off with this subject. To follow this, in the second six weeks of the course, it was felt that a national election year provided the stage for an attempt at a bipartisan description of politics on various levels by various experienced local people. For the final period, it was decided to ask an experienced lawyer to deal with major national constitutional issues as an introduction to the law and its problems.

This plan was arrived at initially in a meeting on June 28, 1960, attended by Leah Dalto, of the PTA Council, by Florence Bloom and Ben Mendelsohn, representing the high school social studies teachers, and by Sloan Wayland, Milton Carrow, James K. Anderson, Betty Friedan and John Landgraf from the Community Resources Pool.

The plan was presented to the high school social studies teachers on September 29, 1960, in a meeting at the Tappan Zee High School. Those present were Landgraf, Carrow and Anderson, from the Pool, Arnold Rist, the school coordinator, and the following high school teachers: Florence Bloom, Robert Dillon, John Lick, Joseph Masucci, Robert McMann, Ben Mendelsohn and Robert Meylan. There were no voiced objections to the proposal, although one man expressed his wish to remain unconnected with the program, as he felt that it had no relation to his teaching.

The first Saturday meeting came on November 5, 1960. School Coordinator Rist and the high school teachers had selected 20 tenth, eleventh and twelfth grade students who, they felt, might benefit from the work. Some of these were relatively superior students, and others were considered to have undemonstrated ability that might be awakened by the stimulation of such a program. There were approximately equal numbers of boys and girls throughout the 18 weeks.

John Landgraf of New York University, conducted five of the first six meetings and one was conducted by Dr. Arthur Woodward, a resident psychiatrist at Rockland State Hospital, who serves in the Child Guidance Clinic in the District schools. The anthropological topics covered in this period are given below:

Nov. 5. Introductory anthropology, science and social science.
Nov. 12. Physical anthropology, the geography and biology of man.
Nov. 19. Anthropology and psychology: socialization, personality and culture.
Dec. 3. Anthropology and language study.
Dec. 10. Anthropology's relations to economics, politics and sociology.
Dec. 17. Anthropology and history: archeology and culture history.

Those students who appeared regularly at the Saturday meetings were urged to participate in discussions within a circle of chairs with the boys arranging themselves on one side and the girls on the other. A high point of these meetings is remembered by this writer as the sharp discussion which finally brought forth the concepts the group had of kinds of people in their world, as they regularly categorized them in their own speech.

Difficulties of weather and scheduling of visiting lecturers plagued the second six weeks, and the program came out differently than planned. Those who finally led Saturday meetings were:

- William Diebold, Economist, Council on Foreign Relations, who led a discussion of international politics on January 7, 1961

- John Landgraf and Milton Carrow, who participated in a discussion of national politics on January 14, in the absence of John Kraft of the political survey firm of the same name, who was called away suddenly.

- Isabelle Savell of Governor Rockefeller's office, who brought Assemblyman Nowicki with her on January 28 for a discussion of New York State politics.

- James K. Anderson of the Columbia University School of Business, who led discussions of local politics on February 11 and 18.

- David Colwell, formerly of Richard Nixon's staff, who talked to the students on national politics on February 25.

The weather and varied speakers gave the students no continuity during these meetings and, because they had grown accustomed to the question-discussion procedure, they reacted somewhat to other methods of presentation. Their own report was that some speakers were not stimulating - "they just lectured."

On March 13, 1961, an evaluation meeting on the Social Science program was held at the high school. Present were Bloom, Mendelsohn, McMann, Rist and Superintendent Michelson from the school system; Friedan, Wayland, Carrow, Colwell and Landgraf from the Pool staff. In respect to the first six weeks, it was agreed that the anthropology presentation had been somewhat abstract and could have dealt more intensively with any one aspect, with the addition of some feeling of participation in research by the students. For the second period, the feelings of the students were echoed - that the instructors had not related well to the students.

A proposal was made by the Social Studies teachers that in a coming period, or in another year, the program might take up a number of major concepts that are of current interest to the students. Nationalism, imperialism, colonialism, segregation, socialism were suggested as possibilities. It was agreed that a start could be made on this in the remaining meetings, and it could be planned for the next year.

During the four Saturdays of March, Milton Carrow, attorney-at-law, New York City, led the student group is a discussion of public law which dealt with major constitutional issues. The questions of separation of powers, of judicial review and of due process were taken up through re-argument of three famous Supreme Court cases, and student participation was active and imaginative. On the fourth Saturday, the students were led into discussion of a hypothetical set of laws for colonization of Venus, which changed itself into a vivid argument over the relationship between general or "absolute" law and particular customs or cultures (apparently from the earlier anthropological discussions.)

The two-week gap for Easter vacation was followed by a final meeting on April 15 which began with a resumption of the "Venus" argument and ended with a general discussion of the whole program in the social sciences. The six students present on this last day had participated in virtually the whole course of meetings and thus their criticisms were of considerable value. They felt that the program tried to cover too much with too many people; they would rather have spent the time with one instructor, going deeply into only one subject. They particularly disliked the one-day discussion leaders who, while informed of the peculiar format, had tried to compress complex material into a single instructional session with a didactive formal outline.

In positive vein, the students suggested that a future program might cover observation or other experimental techniques, might bring in foreign visitors such as students in New York colleges, or might deal with contrasting governmental systems. Some interest in psychology was also expressed.

In general, the impression was prominent that these students considered the Saturday sessions as free discussions on an abstract level, with the regular classroom work as core or depth. Several of them obviously had reservations about some of the viewpoints that were presented to them, but were eager to participate in further discussion of them and to hear and talk about other new ideas.

At this writing, the feeling is strong that the ten students who were still with the program in the final five weeks (ten was the beginning expectation before the program began) had realized something of value from their participation. The best way to put this is to say that they gained an awareness of the relativity of points of view or frames of reference; they came to the realization that a particular statement was not necessarily final, even if it came from authority; that an opposing or different point of view could be held by others without grave penalty. And this developing awareness of the complexity of thought seemed to make them both more critical and more respectful, to take more seriously their own opinions, and the opinions of others, including perhaps their teachers.

Difficult as such an awareness might be for teachers who must deal with large classes and relatively fixed materials, it is basic to social science as an activity, and for at least a few of the students, it seems to have been achieved. Without such an attitude, the developing student and potential intellectual contributor cannot meet strange concepts and deal with the unfamiliar that becomes knowledge after it has been investigated and understood. It is this ability to handle the unusual and question the usual that makes scientists, writers and political or business executives creative.

As a final item to this report, it should be mentioned that the program failed to achieve understanding from the social studies teachers in the high school. They felt that the work was in competition with their activities, that the program should have been closely supervised as a supplement to their class work, and that the discussion leaders were not enough experienced with the age-group with whom they dealt. With the particular situation at Tappan Zee High School, it would seem to be extremely difficult to overcome or adapt to these objections and still provide the kind of values that the Community Resources Pool would like to develop in the students.

1. Seminar Leader: Milton M. Carrow, (Attorney-at-law)

Five sessions were devoted to subjects within the public law (constitutional and administrative) field. The topics were:

- Separation of powers
- Judicial review
- Bill of Rights
- Fourth Branch of Government
- A Government on Venus

The method used in the first three topics was case analysis. The background and facts of several important, illustrative cases were described by the instructor; the pertinent legal issues were presented; and the members of the class were encouraged to comment on them. Thus, the example for the separation of powers problem was the noted Steel Seizure case of 1952. The question was whether President Truman had constitutional power to have the government take over the nation's steel mills, as an emergency measure, in the midst of the Korean "police action" and on the eve of a steel-workers' strike. It was maintained that he had no such power because power over "commerce" was a legislative power and the Congress had, by enacting the Taft-Hartley Law, denied such power to the President. The Supreme Court held, with three judges dissenting, that the President sought unconstitutionally to invade the legislative domain.

Most of the members of the class were conversant with the economic and historical aspects of the case, and engaged in a lively discussion. With a minimum of direction, they raised most of the questions involved in the actual litigation. In a test vote, the majority, not all, of the class sided with the dissenters in the Supreme Court.

For the judicial review problems, the case discussed was the so-called "sick chicken" or Shechter Poultry Corporation case. Like the previous session on the Steel Seizure case, the members of the class appeared interested in the key issues.

In the Bill of Rights session, the constitutional provisions were first read and cases illustrating free speech (the recent Rockwell case in New York City) and the evolution of the rules relating to wiretapping were analyzed.

Because the instructor had a special interest in administrative law, he devoted part of the fourth session to a lecture on some of the more important administrative agencies, such as the Interstate Commerce Commission, the National Labor Relations Board, and others. He raised the question whether they constituted a fourth branch of government. The second part of the session dealt with several cases illustrating the powers of administrative agencies.

The final topic, a government on Venus, was intended as a means of reviewing some of the constitutional problems discussed and eliciting questions regarding others. Its format was a fictitious opportunity to migrate to Venus, with the class having the responsibility of organizing the government. Although there was considerable interest in the general topic, it was difficult to confine the discussion only to problems of government. The members of the class insisted on raising sociological and practical questions. They found it difficult to deal with problems on a more abstract basis.

In evaluating the sessions, from the standpoint of the instructor, it can be said without hesitation that 10th, 11th and 12th graders appear quite capable of understanding and contributing to a discussion of the sort of public law problems here covered. They seemed to be particularly responsive to the case method of analysis. In a final "bull session," they said they enjoyed going into such problems in depth; they felt they ought to be called upon to do some outside work; they recognized that their regular school work must be conducted in a more disciplined fashion than these seminars; they suggested that more time be devoted to the fields covered.

2. Seminar Leader: Mrs. Isabelle Savell,
(Assistant to Nelson Rockefeller, Governor of the State of New York)

The seminar on State Government was relatively brief, and it was not possible to do more than touch on the highlights of the State Administration's program, review State services, and discuss some of the problems with which State government deals.

This basic material was supplemented with film slides from one of the departments which lends itself to scenic treatment - the Conservation Department - and by a talk by the County's recently elected assemblyman, a young man who had been active in local and State Republican politics (former president of the Young Republicans of the State), and who had served as counsel to the State's Lieutenant Governor before his election as Assemblyman. He was, therefore, in a position to deal with political, administrative, and legislative aspects of State government.

While the students listened to our disquisitions with polite interest, they lighted up when we reached the question period, asking questions which were searching, sometimes personal, sometimes out of focus, but indicative of an important reservoir of interest and potential concern.

I believe the seminar helped the students better understand the relationship of State government to local and national government, and sharpened their realization that government is a matter of "we" not "they."

D. Critical Thinking Report

The Critical Thinking Seminars were led by:

- Dr. Henry M. Magid, Department of Philosophy, City College, New York City, N. Y.

Teachers from the Mathematical Department who made suggestions for this seminar were:

- Martin Frank
- Mrs Mae Albelli
- Charles Johnson
- Dan Dinan
- Peter Lawton

Coordinator of the Critical Thinking project was:

- Dr. Henry M. Magid, Resources Pool

A. Report of Dr. Henry M. Magid, Critical Thinking Coordinator (Department of Philosophy, City College, New York)

1. Objectives of the program.

a. The aim of this program was to introduce high school students to some of the technical aspects of the formal study of argument, proof, and scientific method. It was undertaken on the assumptions that some of the materials of logic were within the capabilities of high school students, and that acquaintance with some of the techniques of logic would prove to be useful in the fields of mathematics and science especially, as well as in other fields.

b. A secondary aim was to determine precisely which portions of the field of logic are suitable for these students and to develop the appropriate materials.

2. Method of operation.

a. The instructor met with the students once a week for two hours in a series of 18 meetings, divided into three six-week sessions.

b. No work outside the classroom was required.

c. A topic in logic was introduced, explained and discussed. (see item IV below) Problems were presented to the group for individual or team solution.

d. Notes and further problems, prepared by the instructor, were issued to the students at the start of the next session for purposes of review and to provide a point of departure for the further development of the subject.

e. Two tests were administered, the first in the sixth session and the second in the eighteenth. The purpose of these tests was to gauge the general progress of the group and to weed out those not absorbing a significant portion of the material. The final test was used to guage the overall results. No attempt was made to grade individual students.

3. Students.

a. Selection procedure: Promising ninth-graders were recommended by their teachers. (The program in Critical Thinking was the only one available to ninth-graders, though this was not known at the time the teachers made their recommendations.) The instructor talked to the selected group about the program, its purpose and content. Each member of this group was interviewed by the Director of Student Personnel, and all indicated a desire to take part in the program. All were accepted after securing parental permission.

b. The original group had 29 students. These were all accepted, though it was a large group, because nothing else was open to ninth-graders. After the first six weeks, the group reduced itself, by withdrawal chiefly, to about 15.

c. Attendance held at a high level and most absences were accounted for by conflicting activities, sports, music festival, doctor's appointments, etc.

4. Topics covered (some topics required more than one session.)

a. Nature of inference
b. Informal analysis of argument
c. Analysis of categorical syllogisms
d. Boolean algebra of propositions
e. Immediate inference
f. The categorical syllogism
g. Molecular propositions
h. Propositional calculus
i. Informal fallacies
j. Use of hypothesis in scientific investigation
k. Problems of verification
l. The cryptogram: a case study in problem solving
m. Experimental methods
n. Probability

(Sample materials are attached to this report)

5. Response and recommendations

a. Student response: A majority of the students evinced an interest in at least some part of the subject matter. Item 1 in 4 above attracted the greatest amount of interest, though there was considerable in items g, h, and i. The students varied widely in their ability to absorb the material. Those who were already engaged in the study of geometry seemed to progress much faster in the material on deductive logic (items a through h), though this correlation was not evident in the material covered later.

b. Teacher response: Two conferences were held with the mathematics teachers to discuss the program and its impact on their students. In general, the teachers were favorable to the experiment, though they showed some doubt about a few of the students selected to participate. Their response is best indicated by listing the recommendations they made at the final evaluation session:

- That closer relations be maintained between the instructor and the math teachers.

- That teachers sit in on the classes from time to time. (This was done only occasionally, and not encouraged because it was felt that it might inhibit the students.)

- That the selection procedure be modified to require approval by the mathematics teachers and a personal interview with each potential student by the instructor before notification of parents.

- That a correlation be made between the results in Critical Thinking and the results in mathematics (geometry).

- That a nine-week series be given next year, once in the fall for tenth-graders who did not participate this year, and once in the spring for ninth-graders taking geometry, to start each term as early as possible.

- The possibility of a summer series was also suggested.

c. Instructor response: The instructor reports that the program was for him both challenging and exciting, and as enjoyable as any teaching he had done before. He is convinced that portions of logic can be taught effectively and usefully to ninth-grade students who are properly selected, but admits that the materials used require considerable development. He accepts recommendations of the teachers on how to procede next year, and also recommends that a text-book be used as well as some small amount of outside work. The size of the group should be kept down to about fifteen. The two-hour session should be devoted to a one-hour presentation and question-answering session, and one hour of "laboratory work" on problem material.

Critical Thinking: Second Session Henry M. Magid

I. Here are some of the concepts that you were introduced to last week:

Argument, premise, conclusion, proposition, assumption, form of argument, valid argument, invalid argument, fallacy, ambiguity.

Be sure that you know the meanings of all these terms. A good dictionary will be of some help.

1. How do you determine whether a series of statements expresses an argument?
2. How do you determine which statement expresses the conclusion, and which statements express the premises? (Recall the significance of "hence," "so," "it follows that," "therefore," "since," "because," "for," etc.)
3. How do you determine the form of an argument?
4. What does it mean to say that two arguments have the same form?
5. What does it mean to say that validity depends on form?
6. How can you show in a simple way that a particular argument is invalid?
7. What have you shown when you have shown that an argument is invalid?

II. Here are some arguments which you may use to test your grasp of what has been discussed.

1. All best sellers are popular, but no technical books are best sellers. Hence no technical books are popular.

2. Some cooks are taxidermists because some cooks stuff turkeys and anyone who stuffs animals is a taxidermist.

3. You are lying when you say that you did not enter the building because you left your footprints in the snow, and if anyone was to enter the building he had to leave footprints in the snow.

4. Unless people object beforehand, they will have no right to complain about the results. Since there are some who objected beforehand, they can complain about the results.

5. Only those who can park parallel to the curb can pass their driver's test. Since these boys can park parallel to the curb, they can pass their test.

Critical Thinking: Third Session **Henry M. Magid**

I. Recall the meanings of the following symbols: "$\supset$" "$\sim$"

Determine which of the following arguments are valid and which are invalid and give an illustration of each:

$$\begin{array}{c} p \supset q \\ \sim p \\ \hline \sim q \end{array} \qquad \begin{array}{c} p \supset q \\ p \\ \hline q \end{array} \qquad \begin{array}{c} p \supset q \\ q \\ \hline p \end{array} \qquad \begin{array}{c} p \supset q \\ \sim q \\ \hline \sim p \end{array}$$

II. Below you will find sets of sentences. Each sentence expresses a proposition. Which sentences in each set express the same proposition?

1. a. Only hard workers will succeed.
   b. If a person is a hard worker, that person will succeed.
   c. All who will succeed are hard workers.
   d. All who work hard will succeed.
   e. No one will succeed who is not a hard worker.
   f. A person will not succeed unless he is a hard worker
   g. None but hard workers will succeed.

2. a. Some great men had humble beginnings.
   b. Some great men did not have humble beginnings.
   c. Some who were not great men did not have humble beginnings.
   d. Some who had humble beginnings were great men.
   e. A few great men had humble beginnings.
   f. There are great men who did not have humble beginnings.
   g. There is at least one great man who had a humble beginning.

3. a. No avid readers are bored.
   b. All avid readers are individuals who are not bored.
   c. No bored individuals are avid readers.
   d. All bored individuals are persons who are not avid readers.

4. a. Some happy people are not content.
   b. Some people who are not content are not people who are unhappy.
   c. Some content people are not happy.
   d. Some content people are happy.
   e. Some happy people are people who are not content.
   f. Some people who are not content are happy.
   g. A few happy people are not content.
   h. Few happy people are not content.
   i. To be happy it is not necessary to be content.

A. Formulate the following in symbolic form:

1. If the groundhog comes out of his hole on February 2, and if he sees his shadow, then there will be six more weeks of winter.
2. "When a district falls behind in its building program, more than one youngster is badly shunted about, even if in the same educational system." (Rockland Journal-News, Jan. 30, 1961)
3. "He also pointed out that such a law, if passed, would be extremely difficult to administer, since it offers not control by the state over the quality of the facilities offered to the public." (Ibid.)
4. "All heart cases can be cared for best if diagnosed early, and almost every heart condition can be helped by proper treatment." (Crit. Feb. 5, '61)
5. "Many men sincerely feel that they must believe in what they do, not realizing that it is easier to be ethical if one also believes in one's product or service." (Quoted in American Salesman, Jan., 1961, p. 63)

B. What happens when you deny a proposition?

Whenever you deny a statement or proposition, you are by that very same act, asserting the truth of another proposition, viz. the contradictory of the original proposition. Sometimes it is easy to determine what proposition you are asserting. E. g., when you deny the proposition "It is raining," you are asserting the proposition "It is not raining"; when you deny the proposition "He will come," you are asserting the proposition "He will not come." Sometimes it is much more difficult. What would you say you are asserting when you deny each of the following propositions:

1. He will come if we ask him.
2. He will come and he will bring his guitar.
3. He will come or he will send someone else.
4. He will come only if we promise to be nice to him.
5. If he doesn't come, we will not play or we will have to get along without him.

Can you formulate the contradictories of the proposition given at the top of the page?

(cont.)

C. Some equivalences:

1. $(p \supset g) \equiv (\sim p \vee g)$
2. $(p \supset g) \equiv \sim (p \cdot \sim g)$
3. $\sim\sim p \equiv p$
4. $(p \cdot g) \equiv \sim (\sim p \vee \sim g)$
5. $(p \equiv g) \equiv (p \supset g) \cdot (g \supset p)$
6. $(p \supset g) \equiv (\sim g \supset \sim p)$

Critical Thinking: Twelfth Session **Henry M. Magid**

Informal Fallacies

In general, a fallacy is an argument that appears to be correct but is not. The two basic types of fallacies are formal fallacies (e.g., Fallacy of Affirming the Consequent, Fallacy of the Undistributed Middle) and informal fallacies. Informal fallacies are divided into those that arise from the misuse of language (linguistic fallacies) and those which arise from other causes (chiefly irrelevant evidence).

The following informal fallacies have been noted:

A. Linguistic
1. Equivocation
2. Amphiboly
3. Accent
4. Division
5. Composition

B. Non-linguistic
1. Appeal to pity
2. Appeal to authorities
3. Appeal to Force
4. Ad hominem
5. False cause
6. Begging the question

Try to identify the fallacies, if any, in the following arguments:

1. Gentlemen prefer blondes. How do I know? A gentleman told me so. How do I know that he was a gentleman? I know it because he prefers blondes.

2. Some day man will disappear from the earth, for we know that every human being is mortal.

3. KILLER SAYS DEAD MAN WAS CHASING HIM WITH DRAWN RAZOR (Headline)

4. Johnson is a violinist in the best orchestra in the country, therefore he is one of the best violinists in the country.

5. I have a right to express my opinions freely. Whatever is right, it is my duty to do. Therefore I have a duty to express my opinions freely.

6. You don't have to pay any attention to the surgeon who says that you need an operation, because as a surgeon he would naturally favor an operation.

(cont.)

7. Improbable events happen almost every day, but what happens every day is very improbable. Therefore improbable events are very probable events.

8. More young people are attending high schools and colleges than ever before in our history. But there is more juvenile delinquency than ever before. This makes it clear that to eliminate delinquency among the youth we must abolish the schools.

Critical Thinking: Fifteenth Session

Henry M. Magid

Attempt to solve the cryptograms given below on the basis of the following assumptions:

1. Simple substitution cypher
2. Straightforward message in English.
3. Groupings are words.

A. ABC DE FGH IHBEJKH LM ENN FGDCOE

B. ABCDEAFGCHI FJFKALC LHAMHL FHKHNOGCHI FGBPGL QRAKH FDGLCABS LTDDCRKT GKDBS.

What can you do with the following?

$$\begin{array}{r} \mathrm{A\ U\ R} \\ \underline{\mathrm{I\ P\ L}} \\ \mathrm{B\ L\ U\ L} \end{array}$$

$$\begin{array}{r} \mathrm{E\ C\ E\ P} \\ \underline{\mathrm{L\ B\ C\ I}} \\ \mathrm{L\ A\ E\ B\ I\ L} \end{array}$$

E. Artists' Report

The Art Seminars were led by:

- Eraine Albin, Designer and City Planner
- Seymour Gurlitz, Architect
- Bernard Albin, Landscape Architect, Architectural Director, New York City's Urban Renewal Study.
- Roberta Leber, Ceramicist and Teacher
- Ken Nishi, Painter, Art Teacher
- Hugh Mesibov, Artist and Teacher
- Vaclav Vytlacil, Artist
- Morris Davidson, Artist
- Koren der Karootian, Sculptor
- George Kay, Architect
- Paula Drechsler, Textile Designer
- Blanche Phillips, Sculptress
- Polly Cameron, Illustrator, Children's Books

Teachers from the South Orangetown District #1 schools who helped plan and further the Art program were:

- Lillian Forgacs
- Harold Goldstein
- Sandra Shangold
- Mr. King

Coordinators of the Art project were:

- Eraine Albin, Resources Pool
- Lillian Forgacs, School

A. Report of Eraine Albin (Art Coordinator), Designer and City Planner.

All children selected to participate in the Art seminars were from the ninth grade, and were recommended by their art teachers as having shown exceptional ability, aptitude or interest in some area of art.

The Art Committee chose as the theme of this project the sources of creativity in all forms of artistic endeavor and the resultant effects on human lives and environment. Our object was to expose these students to as many as possible (within the limitations of time and human resources of the area) of the many forms of artistic endeavor. The program was divided as follows:

- Architecture, interior design, landscape architecture, and city planning
- Painting and sculpture
- Crafts

Six weeks was devoted to each section of the program.

Students were taken on field trips, via bus or parent carpools; we took advantage of the en route time for lecture and discussion. Buildings, furniture showrooms, museums, studios of artists and sculptors, craftsmen's shops, schools, photography studios were some of the places the students were exposed to. Slides and movies were used in the classroom when it was otherwise impossible to transport the class to the place under discussion. (For example, furniture factories in this area were not open on Saturday.)

Attendance was good, except after disruption of schedule due to snowstorms and other causes, but picked up again later. Interest was high generally, but differed on each subject. The boys were more interested in the architecture and furniture construction discussions, while the girls were excited by the visit to an exhibit of materials, crafts, rugs, furniture in the Danish Government's exhibit at the Metropolitan Museum. Boys showed more interest in those sessions in which they were asked actively to participate by creating something, as at the ceramic studio of Roberta Leber and the sculptor's studio of Koren der Harootian. They worked at the wheel and with the sculptor's tools on stone. The girls, while interested in watching, were reluctant to try working with the materials. I feel that this was the result of the natural timidity of girls of this age group, coupled with, perhaps, a lack of knowledge of tools. Questions were asked by all the children, more frequently by some than others - the more shy ones only infrequently.

However, even the shyest child became quite animated and participating when we arranged to bring the whole class to her home, where her father, a commercial artist, discussed his work with the class. One of the older boys, who had been a "trouble-maker" in the school the previous year, walked more than three miles during Christmas vacation in the midst of a snowstorm to come to a session on landscape architecture and city planning. Later, he told us that he was especially interested in commercial art, and thereupon the visit to Mr. Tanaka's studio, mentioned above, was organized. The generat interest of the students varied from child to child, depending on the personality and ability for communication of the artist, the subject matter, and the area of aptitude of the individual children.

We had intended to have a special project done at home or in free time at school at the end of each session. While interest was high in the beginning of the project, the architect seminar leader came in during school hours to work with the students and art teachers on their project - a design for a water tower. However, because of the pressure of other activities and examinations, not too many children were able to complete this project. Later in the spring, craft classes, held during school time, were led by Mrs. Leber and the response to this phase of the program was very good.

One of the problems here seems to be the need for a certain amount of supervision and guidance while working on the project, and the difficulty of transporting materials to their homes. Another appears to be the lack of technical skill (they were not expected to have it, really, at this age level; however, it became a problem because the Saturday morning classes were not designed to help them too much in this respect), accounting for the loss of interest in the assigned out-of-class projects. One thing became evident to the students, however: that within each field, there are difficulties and problems requiring a high degree of skill and knowledge, plus hard work; thus the respect for the contributions to society that artists make was acknowledged increasingly with each session.

My recommendation is that the future class time on Saturday be devoted to a project supervised by the artist-teacher of the Resources Pool. In addition, if possible, to have classroom assignments coordinated with the Saturday sessions.

1. Seminar Leader: Seymour Gurlitz, Architect

The first session on architecture was a field trip to and through various parts of New York, with the en route time used for lecture and discussion. As the trip passed various structures, Mr. Gurlitz pointed out the relationship of buildings and use areas, the results in structural shape of regulations on zoning, types of structures, the comparison of the structural methods used in older buildings like the Church of St. John the Divine and the newer methods of concrete and steel, such as the Seagram Building, Lever House, the United Nations' Building and the Guggenheim Museum. The civic center was visited, as were some of the complexes of new housing super-blocks.

The second week of the session, Mr. Gurlitz took the students to his office and discussed the work of an architect and his education. The following excerpts from the workbooks of students indicate the interest they took and some of the important things they learned from this seminar leader:

"Buildings have functions. Classification of types: housing, recreational, commercial, industrial, educational, medical, public welfare, governmental, religious.
Washington Bridge designed by Cass Gilbert.
Guggenheim Museum designed by Frank L. Wright. Reinforced concrete; abstract, but quite unique.
St. John the Divine was started in 1898 and won't be finished for approximately 50 years; masonry-bearing building and will have the shape of a cross in the front.
Seagram, Lever and Chase Manhattan buildings on Park Ave. do not have basements; built on stilts which go under the sidewalk and between the tracks of Grand Central Station. Use of steel makes it possible to build great skyscrapers. With steel beams to support the building, walls do not have to be so strong. They can be of glass or aluminum.
Building materials: Stone is a natural material; has only to be cut into the shape wanted. Those used mostly are limestone, marble, granite, sandstone and slate. Rounded stoned are called fieldstones. Wood is another natural building material. Pine and oak are very common."

"Houses: Different partly because they are built to fit different climates, or must suit particular man's type of living. Since first houses were built, people have learned to build better and better houses. A person who lived in one of the early round houses would marvel if he could come into a 'modern' house. Plumbing, electric lights, soundproof walls, furnace, stove and refrigerator would seem to him like magic.
Types of homes since the beginning of time: cave home, Indian tepee, adobe hut, log cabin, Indian cliff houses, thatched cottages, southern mansion, modern apartment houses, and modern home.
In other lands: igloo, alpine chalet, Chinese houseboat, half-timber house, Laplander House, Roman house, Arab tent, East Indian grass-roofed house, lake dwelling, medieval castle and African hut."

"Office of Seymour Gurlitz: He must decide after his client has seen him what type of building, type site, is suited for; brick or wood, etc. He must consider zoning, cost of job, client's budget and function of building. Then he sketches the building and draws up a contract. Working drawing - a message from the architect to the contractor telling what the building is wanted to look like. Actual work is from drawing."

2. Seminar Leader: Eraine Albin,
Designer and City Planner

Two sessions on the subject of Interior Design were conducted. The first was a field trip with the lecture-discussion taking place aboard the bus to New York City. The discussion covered the essential nature of interior furnishings, the use to which an article of furniture is put and how the use determines its shape and the materials which form it. Materials and their function were discussed and samples of various types were given the students to examine.

From the component part to the organization of the whole room or space, and the relationship of different spaces to each other was the next item of discussion. Construction of furniture and other elements of interior furnishing was emphasized when viewing the Danish Government's exhibit of home furnishings at the Metropolitan Museum. The historical development of Danish furniture was illustrated at the exhibit. Textiles, rugs, lighting fixtures and other craft items were examined and discussed.

From the Museum, the class went to the Herman Miller Furniture Company's showroom, where the students saw the machine-made products of such American designers as Charles Eames, Alexander Girard and George Nelson. One student wrote in her notebook:

> "Herman Miller display of modern furniture: somewhat like Danish furniture. He uses color to show feeling, some were bright, others exotic and still others sad. Many of his desks, etc. were examples of saving space, simple, yet lovely. The arts of Denmark - mainly chairs, although industry has taken over, the skilled craftsmanship is still needed and used. Ancient craft tradition lives on in Danish design - utensils are also made in a modern way - simplicity."

Next, the two forms of design were tied together in their artistically correct surroundings for the class as they went through the offices and special rooms of the Seagram Building. Many exclaimed when they saw articles of furniture used in an office that they had previously seen at the Exhibit or showroom. The most exciting part of the tour of this building for the group was the interesting lighting arrangements which occur throughout the building, and were expecially delighted with the ones that could be dimmed enough for movie showings, yet be light enough to take notes under. The huge modern paintings, the floor-to-ceiling door, and the panelling that did not touch floor or ceiling caused comment, and all the chairs and couches were "tried on for size."

At the next session, the education and training of an interior designer and the methods of professional practice were discussed, followed by a film illustrating the processes of manufacture of Danish furniture, weaving and other crafts.

3. Seminar Leader: Bernard Albin,
(Landscape Architect, and Architectural Director of New York City's Urban Renewal Study)

Mr. Albin conducted the last class in the six-week period, devoting the seminar period to the subject of landscape architecture and city planning. The various aspects of design and planning with which a landscape architect's work is concerned, as well as the selection of plants and their ecology were discussed.

Then a series of colored slides, showing the broader aspects of city planning were shown to the students, during the course of which Mr. Albin showed a plan of a playground and indicated the many aspects a designer must consider when he designs a simple ball field. The boys in the class were most intrigued by this and peppered the leader with questions. Other slides showed some of the new towns and redevelopment projects which Mr. Albin had either helped to design or had visited.

In addition, slides of pictures taken in other parts of the world were shown to demonstrate how climate directly influences the environment we create for ourselves. A new town in British Columbia, which Mr. Albin helped to design, was shown and evoked the following from one student's notebook:

> "Landscaping in B.C. is not as direct a project as the other arts. Flowers are only a small part of landscaping. The aluminium company built a town near the Alaskan border. Influenced by U.S. and Canadian designs. 50,000 people, different designers may work on different things -- houses, highways, schools, cities, etc.
> In Mexico, water is used for coolness, such as fountains and pools. A landscape architect is interested in all the three-dimensional problems connected with and near the area to be designed.
>
> "Central Park is artificial - it had to be made by architects and designers."

4. Seminar Leaders: Ken Nishi, Painter, Art Teacher
Hugh Mesibov, Artist and Teacher

The second six week period was devoted to visiting the studios of painters and sculptors in the county. Divided into two three-week periods, the first part was concerned with artists who worked realistically or with some element of realism or object in their art; the second with artists who worked in a more abstract way.

With Ken Nishi, the students went first to the studio of Thomas Costigan, painter and sculptor, who demonstrated how his style of working had changed during the ~~fifty years~~ he has been an artist. Next, they visited the workshop of Koren der Harootian, sculptor, who showed them many of his stone sculptures and then demonstrated the actual cutting of stone and the designing of stone-cutting implements. Many of the boys tried their hands at carving the stone, at Mr. der Harootian's invitation. At great length, the sculptor discussed his method of discovering the figure within a piece of stone, his philosophy of life, and the means by which an artist must work and live in order to survive until he is recognized.

James Tanaka, commercial artist at the Walt Disney studios, was the last of the "realistic" artists to be visited. Mr. Tanaka lives in a contemporary house; students incidentally, had an opportunity to evaluate some of the points that had been learned in the architecture session. Mr. Tanaka demonstrated many of the processes which a commercial artist must know. He exhibited some of the designs he has made for toys and other objects, along with the working drawings for them.

Seminar leader Hugh Mesibov took the class to the studios of Blanche Phillips, a sculptress who works in metal in a completely abstract form. She outlined her development as a sculptress and then demonstrated her metal technique by making part of an object. During that same visit, the students met Miss Phillips' husband, Langley Howard, who is a painter and illustrator, and were able to see many of the cover designs he has created for Scientific American and other magazines. Mr. Langley described several of the processes which artists use for reproduction.

The next studio visit was to the Colonial stone barn of Richard Pousette-Dart, artist and recent Guggenheim award winner. This large studio was crowded with hugh canvases in many abstract styles and color schemes. A serious discussion between the students and the artist about the role of the artist in society. Mr. Pousette-Dart feels that an artist must paint the way he sees things and the way he feels about things in life; he must do this in his own way, which may take many working years. Mr. Mesibov then conducted the class around the studio and encouraged the young people to express their feelings about many of the paintings there.

Lastly, Mr. Mesibov's studio was seen. He, too, displayed paintings which he has done over a series of years, illustrating how a painter develops his own style by studying and being influenced by many preceding artists until he evolves a direction of his own. This discussion included reference to all of the well-known painters who had influenced his own development, with an analysis of each painter's work.

5. Seminar Leader: Roberta Leber, Ceramicist and Teacher

The first week of the last session, the internationally-known glassmaker, Maurice Heaton, was visited, under the guidance of Roberta Leber. There the students saw stained glass windows created by Mr. Heaton and his father some years ago and the more contemporary glass objects which he creates mostly today. To the great interest of the children, the present processes that are used to transform the sheet glass to finished product were explained in detail; particularly were they intrigued with the ingenious methods Mr. Heaton uses to transfer his patterns to glass. The firing and shaping methods were also discussed and demonstrated. At this studio, the girls asked more questions than did the boys; however, on the way home, the first comment by a boy was, "That was keen!"

The second trip was to the living-and-working studio of Gilbert Rose, where the class saw the method of silk screen printing of wallpaper and fabric. Although many of the group had heard of the process, all found the demonstration of the method used particularly by Mr. Rose exciting and were quick to acknowledge the dramatic use of color that reflected Mr. Rose's many years of work in the theatre as stage designer and dancer.

The third trip was one of many interesting parts to various craft shops and museums in New York City. Bonnier's was the first stop, where beautifully designed Scandinavian art objects were viewed and discussed. The boys handled and studied many stainless steel pieces, and seemed to be fascinated by their streamlined beauty. The Finnish glassware on display there caused much comment. Then, at the KLM office, they saw the Gyorgy Kepes' black and plastic mural. The movement and interesting use of materials in this piece was liked especially by the boys.

On then to America House, where a number of the students experienced the thrill of recognizing objects of art and their creators. There was an interested discussion of the screens of enamel discs and wood, and this led to a general discussion of the processes and techniques used. Lastly, at the Museum of Contemporary Crafts, the students saw over-adventures in stitches by Mariska Karaz and the pottery of Kathern Choy. The hangings of Miss Karaz evoked such comments as, "that must be a collage - we learned about that technique in school," "why does she use a piece of fur in her hanging?"

The fourth trip was to Roberta Leber's own studio, where the display of finished ceramic objects led to a lively discussion about equipment and process. Again the adventurous boys enjoyed a fling at the potter's wheel. The need for accuracy with glaze materials and the possibility of experimentation with unusual chemical ingredients and textural materials was stressed.

The fifth trip again was to New York City, to the Craft Student League and the photography studio of Harold Kreiger, and the Downtown Gallery. At the first stop, a few classes were in session. As the seminar students watched one class employing water colors in wet technique, another working on jewelry involving enameling and metal work, another class in a weaving studio filled with looms and tapestry frames, they were more relaxed on the basis of earlier information learned and seemed freer to comment on color, texture and techniques.

At Mr. Kreiger's studio, there seemed to be quite a bit of excitement, generated somewhat by the recognition of photographs that have appeared in Harper's Bazaar and other magazines. By this time, many students had no hesitancy in asking questions about equipment, settings, methods used to create illusions, to more personal ones: "How did you start your business?" "Did you have a degree?" "How much time do you spend developing pictures?" "How much travel time went into making these pictures?"

The sculpture by Alfred Duca was on exhibit at the Downtown Gallery where the class went next. One girl commented that she preferred less-distorted sculpture and the size did not impress her.

On the way home, the class was assigned a project to do on their free time - a plaque of ceramic such as they had seen on some of their visits. The project was done mainly on "released time" with the cooperation of the schools' art teachers. Not all the plaques were completed, but those who did had a tremendous feeling of accomplishment in learning a bit about technique. The unanimous comment of all the students at the end of this session was, "Where can we go next time?"

Recommendations of Eraine Albin, Art Coordinator

1. The survey or exposure type of class be more concentrated, i.e., more than one artist visited and shorter visits.
2. The students to be selected from those with special abilities and interest.
3. Assignments should be coordinated with the art teachers and done in class by the whole class.
4. Parents' carpools be formed to provide transportation and acquaint parents with the project.
5. A second project, concentrating on one or two disciplines such as painting or pottery should run for several weeks under one seminar leader.

F. Musicians' Report

The Musicians' Concerts were planned by:

- Nettie Simons
- Donald Waxman
- Ann Eagle
- Herb Haslam
- Marianne Potter
- La Noue Davenport
- Kenneth Fricker
- Lucila Montoya
- Bruce Robison
- Edward Simons
- Robert Abernathy

Teachers from the South Orangetown District #1 schools who helped plan the Music Project were:

- James Mintz
- Frank Grasso
- Pat Ciricillo
- Evelyn Daves
- William Terell
- Havrilla Howard

Coordinator for the Music Project was:

- Janet Simons, Resources Pool

Report of Mrs. Janet Simons, Music Coordinator
(Professional Violist and Music Teacher)

Concrete results of the Music Project in the South Orangetown Schools this year consisted of assembly programs in all schools from Kindergarten through ninth grade. A woodwind quintet and a string quartet performed music, demonstrated their instruments, and told something of the history of the instruments and the music, had audience participation and a question period for about 1500 children.

The third concert of Baroque or Early Music was a combination of harpsichord and recorders, performed by three musicians. The children greeted the concert with openhearted enthusiasm and responded very well to questions and discussion, even though it is not music that is often heard and enjoyed.

It was felt by the members of the Music Committee that the main effort should be concentrated in the elementary school grades, since an early awakening to music is important for building deep interest and appreciation in music. It was also felt that music should be presented on a high level and that skilled performers could best guarantee a strong and lasting impression on the children.

The assembly programs were arranged by the principals of the various schools. Programs were presented to six groups -- a woodwind quintet on May 22 for 4th to 6th graders in Blauvelt and Tappan Schools and the Junior High School; a string quartet on May 26 for 4th to 6th graders in Orangeburg School and K to 3rd graders in Tappan and Blauvelt schools.

The principals from Palisades and Sparkill Schools arranged for transportation of their students to Tappan and Orangeburg. Robert Abernathy and Edward Simons, both local professional musicians, organized the performance groups, and arranged for the additional performers needed to come out of New York City. People from other areas in the County were invited to observe these programs with the thought of planning similar programs in their districts. The school principals arranged for classroom teachers to get an expression from the children of their impressions after the assembly programs.

Planning of the Music project was done by participants in the Pool (as listed on the previous page) and all of the music teachers in the South Orangetown Schools participated, and were very enthusiastic about the project. Although original planning had in mind only the elementary schools, music teachers from the Junior and Senior High Schools asked that assembly programs be planned for the higher grades as well. A Junior High School program was planned, but lack of funds and scheduling problems made it impossible for this year. However, plans are for programs to be given next year in the Senior High School.

Other ideas discussed were field trips for small, selected groups from the Junior and Senior High School. Visits to rehearsals of professional orchestras in New York City, such as the New York Philharmonic, Thomas Scherman Little Symphony, New York City Opera, Metropolitan Opera and New York City Ballet are a few that were mentioned. There was not very much enthusiasm for this idea from the school music teachers and the majority of the members of the Music Pool.

There was, however, considerable enthusiasm about the idea of arranging for private music instruction in the schools so that students could improve their skills on the instruments they play in the band or orchestra, and thus improve the overall quality of these musical organizations. The teachers would all be professional performers on the instrument they teach, thus giving school students special help on their particular instruments, as well as enabling the school music teachers to spend more time perfecting the larger groups.

This idea was first presented at a meeting with Dr. Michelson and Mrs. Lund, then to the school music teachers, then to members of the Pool. There was unanimous feeling that if this could be carried out, it would be a wonderful thing for the students, the parents and the schools. Students would pay the teachers for the instruction. The problem of space and scheduling was anticipated, but if these could be worked out in any of the schools, it was felt that it would be a good thing to try for next year. Alternate suggestions were to use after-school time and Saturdays.

Budget problems were discussed at a meeting with the music teachers. Although there were six concerts planned this year for a budget of $450.00, it was pointed out that this was possible because of the generosity of the musicians participating in the interest of getting a program started. For a continuing program of this kind, the cost was estimated at $100 to $150 per concert.

The music teachers also expressed a desire to have in addition to the programs given by small groups of musicians, at least one concert, by an orchestra. They expressed interest in having the Suburban Symphony Orchestra give one of their Young People's Concerts in the Tappan Zee High School Auditorium.

The Lyric Theatre of Rockland County approached the Pool about having a program for school children at their theatre, but this was not possible because of conflicts with many of the students participating in All-County Chorus and Band this year.

The goal for South Orangetown next year is 21 concerts by small groups, including baroque ensemble, all the instruments of the orchestra, and voice to the entire student body in the District, plus a pilot program of private instrumental instruction.

G. Comments of

School Superintendent and Some Teachers

SOME COMMENTS ABOUT THE RESOURCES POOL BY TEACHERS OF THE SOUTH ORANGETOWN SCHOOL DISTRICT #1

"The carry-over from the Saturday morning classes seems quite limited, but this is a singular situation and does not detract from the usefulness of the ssions. The three girls that are attending the Science seminars are shy and show reluctance to express themselves in class. They have personally benefited from the exposure and speak highly of the experience. The material presented in the different sessions has not been correlated to the material discussed in the classroom. The most effective area was the section on Oceanography. It might be considered that the individuals teaching these sessions acquaint themselves with the Science text and become aware of the level and areas covered."

"From the children's comments, I have been led to believe that those in Science were greatly stimulated. Those in the early language art courses were disappointed, though the last one appeared to be a success.

"I ran into difficulties with the Resource Pool whenever they taught an area before I did. Their work took the edge off the subject for the bright children who then complained at having it again. This attitude, of course, spreads to the slower children and ruins my unit. If the Pool will plan in advance and let us in school know, we can plan to introduce the material first. They can then explore more deeply without depriving the other children in the school classroom.

"When I suggested this at a meeting, they appreciated my difficulty, but were reluctant to plan so far ahead. They suggested that instead we tell them what we were planning to teach. With five different schools planning their work individually, it can't probably be worked out as they suggest."

"On the whole I did not find that the work of the group was correlated too much with our actual class work. I found two girls who tried to use what they learned in Creativing Writing to aid them in their story writing.

"In science, the geology fits in somewhat with our work. My students had already done considerable with this on their own."

COMMENTS ON THE RESOURCES POOL BY:

Dr. Eino S. Michelson, Superintendent of Schools, in a letter to Mr. Garland Landrith, President of the PTA Council.

August 10, 1961

Dear Mr. Landrith:

Following is a summary of the changes and improvements in the operation of the Community Resources Pool which I discussed with you during our last meeting. These recommendations are essentially the same as those I presented to the Board of Education and to the teaching staff of the high school.

1. Publicity

Newspaper publicity should be better controlled and coordinated. While it is impossible to influence viewpoints of individual reporters who observe the program, it is possible to get broader and better coverage in local papers. Unfortunately last year, much of the publicity in metropolitan papers and magazines was pointed toward the contributions of the Rockland Foundation, with nothing much said of our school' part and the participation of our staff. This created unnecessary misunderstanding and irritation.

Also, parents and teachers need to gain a better understanding of the purposes and values of the Saturday Seminars. Progress should be reported periodically to the staff and parents, in writing, as well as by means of discussion meetings. The high school administration should assume a more positive and agressive part in such reporting.

2. Planning and Coordination of Seminars

Better planning of the seminars, their content and relationship to the curriculum and to the interest of high school students needs to be done. While it is true that many projects were planned cooperatively with the staff last year, several important ones were not. The Saturday seminars need to be discussed thoroughly with the teaching staff so that they become true extensions of the high school curriculum and of utmost value to the students.

The Resources persons also need to understand better where our students are in terms of competence and abilities and what is likely to be of interest to them. Understanding of these problems will grow, of course, with longer experience on the part of the Resources persons.

3. Selection of Resources Persons

Last year the selection of Resources persons was generally good. The Foundation's part in this selection is invaluable to the school. It would be impossible for our administrative staff to line up as good a selection by itself without a lot of unnecessary work. I suggest in this regard that the qualifications of each Resource person used in the Seminars be reviewed by the school administration. It is possible with even the best of selection methods to make mistakes.

If the above recommendations are sincerely carried out by our staff, our Board, and the Foundation and its directors, I am sure that the resulting educational values will be sound and positive.

Sincerely yours,

(signed) E. S. Michelson
Superintendent of Schools.

ESM:hn

H. Interviews of Children

Interviewer: Gloria Pond, Reporter, Rockland Independent)

A.K. (girl), age 16
Father's Occupation: Inspector for Pipe Factory
Seminar: Social Science, Grade 10-12

A. K. is a high school senior at 16 and trying hard to seem as advanced in her conduct as she is scholastically, I felt. She phrased her comments carefully and seemed poised and proud of her accomplishments, then gave herself away referring to her peers as "children." She is a little puzzled that she has not yet found a driving interest in something, although she seems to do well in all her studies. At present, she is interested in chemistry or teaching retarded children, and working hard in a special class for Regents Scholarship seekers.

She called herself a character and observed that both parents think her obstinate...also said they are both interested in having her further her education as their son is mentally retarded and her sister takes convulsions, so neither can go on with school. She has many extracurricular activities such as church, Rainbow Girls', working four days a week, and a boy friend.

About her seminar sessions, she said they dealt mostly "with man, his habits, interests and reasons why he does certain things... It was very interesting and there was discussion with everyone filling in with any facts they had." She thought the leader "quite a well-educated man...(who) had studied some African tribal languages." She was very impressed with his theories about the formation of language.

Apparently "the class went well..opened an area we were only very slightly aware of and then everyone dug into it. The subject contained areas hidden within it and by his bringing them up, we were able to look into them. He seemed to know how long it would take us to exhaust a subject...he had a plan in outline for each session and it worked very well." The group continued to "participate with what they had previously read only."

She mentioned that they "analyzed the behavior of children and really the teacher was more interested in understanding than learning facts...he wanted us to understand and reason out things for ourselves...I think it made a big difference...the basic difference in ways to analyze certain things about life. Knowing reasons people do things helps you understand their behavior...you associate it with people you know. I can often associate it with people's habits. Everyone has habits, who doesn't?"

The mother of this girl seems to encourage her in every direction, worrying only about her health on this terrific schedule. Her feeling was that her daughter seemed to enjoy it, however, and she obviously is proud of her accomplishments.

J. D. (girl), age 16
Father's occupation: Paper Finisher
Seminar: Three Arts

From a very shy beginning on J. D.'s part, our discussion gradually blossomed to one of the most fruitful of these interviews. She spoke quietly but was determined to help and her own interest in the seminars finally won over her retiring manner.

The seminars, she said, had "helped" her work, even though "most of the kids weren't interested in doing the suggested assignments" (and perhaps she had not done many). "We went deep into some things... I never knew some of these things existed. In school we never talked about making things with glass. We never talked about anything like that. We just draw and stuff." (She repeatedly stressed the newness of the media studied in seminar).

J. D. said she "used to just look at a building like any old building, but now I look at one and know what's behind it, like where you're going to put it, or what kind of people are going to use it, the climate and environment and trying to satisfy people as well as the conditions."

Also, she learned "there's as much inspiration and time and like ...effort in one of those crazy modern things as in a realistic picture like with people or something." Very interesting to her was the time when "we got to see how an artist's studio looks and even saw a woman make a bronze sculpture right while we were watching."

Since the course, she has tried some cartooning and in her art at school is practicing some of the things she remembered from last spring. "We had a very nice class and just had fun together. I guess that's why it was so good." She also thought it "broadened a person's mind" and "could help somebody find out what they really wanted to do, especially by learning "stuff most kids don't get through art" in school. "If I hadn't taken that I might not have taken art this year...besides I decided you can't decide you'll just do some simple job like just putting on noses or something, because if they force you to do something, it just ruins your ability to be creative..."

She said "the architecture course was about the most important - and besides it was the first one and I was eager to take part." It was also kind of "neat" on a trip to New York "to see works in a showroom and look over there and say 'remember we saw him and saw how he did that'."

Mrs. D. was also delighted with the seminars and very proud of her daughter's having been chosen. She said J. had been so interested in the art after that that she took a course this summer she had to audit because she was not permitted to take a second for credit. "She discussed it more with her brother (a teacher of engineering, I think,) than she did with me...He was very satisfied with what she got out of it."

R. B., (boy), age 13
Father's Occupation: Contractor
Seminars: Electronics, minerology, biology

R. B. was openly enthusiastic about all of his seminar work and tried to be very adult in a discussion he obviously enjoyed. Open-faced and energetic, he talked to every point, developed several of his own and seemed to have a clear grasp of ideas presented in the seminars and an awareness of other youngsters in them. The only classes he had missed were when the family went away and he spoke regretfully of those.

"I remember mostly the things we did," he said, and the things "we learned in major discussions and experiments." He said that he had been especially interested in electronics before the seminars and liked that course best. Field trips were captivating, too. He observed that "some kids came away with whole notebooks of notes... I mostly discussed rather than took notes, I bet I hardly filled ten pages." You learn more "with fewer people in classes, I can tell." "Last year in school, I was pretty good in science, but some of the kids sort of dragged it," he said. He was quite sure the "courses were to give kids more encouragement in their fields."

Study of minerology had been conducted "by a very nice teacher. Most of the time it was quite interesting, especially when we explored a new subject. Space travel was interesting. Sometimes, though, I was a little bored if I knew a subject already or if it didn't appeal to me."

He has saved the several fossils found on a field trip and explained at length why only one of his is at all unusual. He also expounded at length on how interesting it had been to look at the rocks up a hill and find the deep scratches and gouges left by the ice barrier and see from which direction it had come.

Comparing seminar studies to school, he said: "In school, you only have 45 minutes and the teacher goes slow so everybody gets it. Here most people just throw it all in your face at once and you try to take it in. I tried to take in most of it. I think I got most of it." He also noted "a per son got more excited about it and tried to catch up, but in classes in school today they don't make any effort to go faster (the slower kids). It's kind of boring."

He said he'd certainly take another seminar, then thoughtfully: "I do prefer science, although I would be interested in just about anything."

Mrs. B. assured me her son had "loved every minute of it." She mentioned that sometimes he is inclined to start and not finish things but carried this through to the end. She opined that "anything that could start an interest in children and would make a kid give up a Saturday for school was certainly worthwhile." Mr. B. seemed pleased at the new importance being chosen and attending seminars had given his son. "You just couldn't shut him up...he wanted to talk about everything they were doing all the time...I think he thinks he knows a lot more than he does...but that doesn't hurt. It gave him a lot of assurance." They both feel he has matured a lot in the last year after a slow beginning, and think the seminar helped him "think further into things."

G.McK. (boy), age 12
Father's Occupation: Teacher of English,
Mother's Occupation: Dental Technician
Seminars: Microbiology, Oceanography and Computer Mathematics

In an initial burst of enthusiasm, bright-eyed G. proclaimed the seminars very interesting, that he had learned a lot and that the teachers were very nice. Every session was fun to him and he had acquired a good number of technical terms that made his duscussion of each course convincing to both of us. Especially delightful were a trip to Lamont where he was "interested in the IBM and in seeing the scientists" and when he "looked in microscopes and saw a whole lot of interesting things." He wasn't even discouraged by a fossil hunt that yielded no specimens.

Of microbiology, he said, "I remember this the best. We made our own slides and learned about the microscope and its own history, how to clean it and carry it and other things about its maintenance... Mostly what I learned is what he told us, not what we did...I don't remember clearly the things we did." He praised the teacher because "he came down to our level so we could understand him," assured me the whole seminar was fun but said "sometimes I think I missed a few ..sometimes I just wanted to stay home and play or something."

The oceanography course, it seems, was "mostly talking." He seems to have become more interested in minerals and mentioned that "some friends of mine and I went into the woods to look for interesting rocks or fossils." He keeps a rock collection to which he adds occasionally, although "most of the time I'm not really looking for them..I just sort of stumble on them...You find a pretty rock and say 'hmmm, I think I'll add this to my collection, and then you try to identify it."

In discussing the machines he encountered in computer mathematics, G. was interested in the way they "remember" digits and seemed quite capable of abstracting to major principles involved, discussing their greater functions on a theoretical basis rather than focussing his concern on specific machines he had seen. He was clear on specifics, but went far beyond as well.

G. said he thought the seminars "were a very good idea because on Saturday all you can do is play...it's better to go." Besides, he continued, "it gave us a challenge sort of to learn something different."

Mr. McK. stepped back into the room after the first part of the interview, apparently fascinated with his lively son's discourse. His presence made no noticeable difference in the boy's responses and it seemed that each is keenly interested in the other. Mr. McK did say "I've heard more listening to him now... I didn't know or ask too much about it at the time...though he did mention it at home." He assured me, "I think they got something from it...I don't see how they could help it, though just how much is hard to determine." Both parents, he said, tried to follow the direction of the course and occasionally had to coax him to talk about it to any great extent. They also said that initially G. had to be urged to go, although after a while he got very interested in it.

Mr. McK. noted that he had heard the seminars criticized for limiting enrollment to certain kids...said some parents felt they should have included others who were interested even if they had lower grades.

M. K. (girl), age 11
Father's Occupation: Factory Worker
Seminar: Grade 6 Creative Writing

A forthright, expressive girl with a lively interest in my interviewing, M. seemed to have a keen idea of what the seminar series had been concerned with. She spoke clearly, formulating her statements with care and often used phrases I felt had come from Mrs. Davis during the series. She recalled each of the six lessons vividly and made use of wide vocabulary quite naturally.

M. explained carefully that Mrs. Davis had been trying to help the group "write more descriptively" and "tell us how to better it." She mentioned liking "group stories where one would start a story and you could add to it and then someone else would."

Recalling occasional special assignments or projects, she emphasized that these could be done "if you wanted to" and in the course of speaking made it clear that she had indeed, wanted to and considered this only natural.

Mrs. Davis taught us...mostly how to put ideas down on paper, so they came out what I was thinking...and how to use more exciting words and not to get so confused your reader doesn't know what you're talking about...We learned to reach a point of excitement not too soon but not too late, either, and to write about things you really like to write about, because then you can really do a good job...than if you try something you don't know about...."

M. beamed when I asked if her father had been interested in the work she was doing and talked at length about how many good things he knows and how he can help when she gets stuck on a composition for school.

Mrs. K. was anxious to help me and spoke proudly of the scholastic interest and achievements of both her children. She stressed that both had good vocabularies and that M. had won an oratory contest that made them very proud. She seems firmly convinced that the children are quite capable of handling their projects on their own and was delighted with the girl's interest in the seminars. She said M. often spoke of the lessons at home, discussed them with her father and was always eager to go, although transportation was difficult.

E. T. (girl), age 14.
Father's Occupation: Factory Worker
Mother's Occupation: Factory Worker
Seminar: Grade 7 Creative Writing

E. used the word "boring" in almost every sentence as this is currently "the thing to do." She was very polite but not particularly interested in the interview and often lapsed into a listless reverie, not hearing my questions. The baby sister for whom she was caring while her mother worked was far more absorbed by my presence.

All of her responses were minutely factual, whether one word or ten. She never ventured into the realm of ideas and is clearly not given to imagination. She recalled several incidents in the television course, but volunteered only what time what happened where.

The poetry class seemed to bore her most acutely and she guessed she had missed the last few. E. noted "the poetry I didn't like so much...talk up on the board gets boring all the time...just like going back to school again with the teacher just talking." She assures me she reads a lot and since "sixth grade (she) started taking books from the library....I take out poetry books sometimes if they're lively...I don't like them if they're too boring. I like mostly funny ones or love poems." She said she could tell if she was going to like what was in a book by whether it was "one of the ones with a shiny cover, or if I read the first and the last ones..." but even then brings home an occasional boring one by accident.

E. seemed a little surprised she was chosen for this seminar because "I really can't do nothing for creative writing. I don't know why they picked me for that...."

The television seminars interested her much more and trips to old houses to look for a setting for a mystery play the group worked on, viewing films "we took apart afterwards" and visiting Channel 7 certainly remained clear in her mind. "Television was much more fun...we all had a say in how we think the play should be written... you know, each one gave out an idea...It was pretty interesting, at least it wasn't dull..."

She also mentioned transportation had been difficult and that she wouldn't go back to another seminar "unless it wasn't a boring one" especially since her mother and father work on Saturday mornings and couldn't drive her.

Mrs. T. was not at home when I called, but on the telephone sounded completely disinterested in the seminars, although she said E. "seemed to enjoy it" and that she would let her go again. Mother of five, she seemed removed from her daughter, and not likely to invite confidence.

E. S. (boy), age 13
Father's Occupation: Garment Cutter
Seminar: Journalism, Grade 7 and 8.

Pleasant and composed. E. spoke lucidly and easily, exploring every point willingly. He was most concerned with concrete considerations and outlined his seminar in a business-like fashion.

"We spent most of the time putting together our own paper... the rest of the time he told us about how they put together papers, how they print it, and the linotype machines and about the teletype. We were going to go see a plant, I think at the New York Times, but we never had time. The seminar ended too quickly...I was disappointed, but then the seminars were on Saturday and I'm pretty busy on Saturdays, so I wasn't too disappointed...I'd rather have seen it, though, it doesn't mean much just to be told about those machines. You have to see them."

He thought "the paper was the best part, the most fun. I was the artist and had to draw some pictures to go with articles. We called it the Tappan Zee Pilot...and I also got to do the setting up and decide where articles would go. The kids in the seminar wrote all of the articles. Everyone enjoyed this part...it was very good, interesting."

Evan said he'd go to another journalism seminar, although he isn't interested in story writing or poetry, so he wouldn't like any other seminar. He thought his teacher this time very interesting. "At the beginning, he lectured and drew pictures on the board and showed how they did everything." (He remembered examples well.)

"I liked it...I like to write compositions too...especially comedy stuff....I just started last year..."

At this point, he seemed to feel that he had discussed everything important about the seminar and couldn't seem to summon anything fresh for any of my probes. Rather than force the issue, I closed the interview.

W. S. (boy), age 13 (twin to boy above-interviewed)*
Father's Occupation: Garment Cutter
Seminar: Poetry, Grade 7 and 8

W. Seemed quite sure of his subject matter, and very assured of his own ability in this direction. I felt perhaps he finds this an important sphere in which he can differ from his brother and that being different is gaining added importance to him at this time.

Discussing the seminar he said "we looked at all kinds of poems, had quite a few, and discussed elements of poetry, such as what kind of a meter it has, what kind of a mood it has. We analyzed many poems, taking them completely apart and finding out what kind of foot - trochaic, iambic and so on. We tried to find out what was good and bad in them, and discussed different types ...We went into 'beat' poetry and poems with music. The teacher brought in a guitar and demonstrated how to put poems to music. We found out that any kind can if the mood is right. We also found that some were made for humor...."

About exercises by the class, he said, "We went into the elements, and discussed how we can write a poem with what we knew about it. We did approximately two or three, I don't remember exactly. We handed them in and after the seminar was over, the seminar leader called us in and discussed our work.

"I'd say it improved my poetry (he had started writing poems before the seminars began) ....and that one, 'Twilight' was pretty successful." He didn't remember the other he had done, but in this one said "part of the meter was off, that was the only thing wrong with it."

W. said he writes when he "sees something that makes him want to write a poem." He said he would go back to a "different continuation of this seminar" but "how much can you learn about poetry?" We learned so much I "think there would be a lot of repeat stuff in another course," and he feels he is awfully busy on Saturday. He likes to attend services and religious youth group meetings on Saturdays as well. He had a tendency to return to this conviction that he had just about learned everything there is to know about poetry.

He felt that the teacher was a "very intellectual person" who "finds the subject interesting and enjoyed it...He said he had learned a lot from that class." W. was quite sure everyone enjoyed the class and that "anyone with any interest in poetry could have joined that class and learned plenty. We learned how to read and enjoy a poem. As an aside he noted, "I could never use my poetry for anything but pleasure."

J. R. (boy), age 14
Father's Occupation: Automobile production superintendent
Seminar: Critical Thinking, Grade 9

John was unwilling to give much of himself to our interview and did not seem to have become at all involved in the meat of his seminar. He repeated many times that he didn't actually learn much and that the course "was way advanced, really." His responses were sketchy and costive and I felt that because his mother remained in the room he was even less open.

Mrs. Robers firmly informed both John and myself that John likes school and that he had been very disciplined about making himself go to the seminars. She said "as long as they're interested a little extra learning at this age is good for them," then qualified "even if they only absorb a little bit." Some mornings "it was sort of a struggle to go over ther," according to her. It was my impression that she wanted to appear cooperative, but hadn't really caught the spirit of the seminar. She obviously had no grasp of what its subject matter might have been or why this warranted study and thought it strange since John isn't so good in English as he is in mathematics that he should have been chasen for this.

John commented that "so many kids kept dropping out of the group" and announced that he didn't think he'd take another "unless it was something he knew something about." He explained the mechanics of their sessions to me and spoke of considering the validity of certain propositions and arguments...noting that if someone says something very general on the radio "you sometimes notice more."

"I think it was related to geometry a lot" was a prelude to the story of his career in mathematics (and the only very penetrating observation I ever drew from him). He observed "when we first took algebra there were a couple of slow draggers and I caught on pretty good." Both he and his mother think he is strongly inclined to mathematics. Comparing school to seminars, he said "in school everybody was about the same and it didn't matter how fast the teacher went" (this followed the news that nobody really understood critical thinking although "it'd probably do you a lot of good if you got to understand it.") In John's opinion, "school is a lot easier" than the Saturday seminars because "you know what's going to go on in school."

He said he only missed one of the seminars, when the family was away. He admitted "if it was a day I thought there wasn't anything better to do I went happily, but if there was something better to do in the neighborhood or something then I went reluctantly. But when I got there I forgot all about it anyhow.

He finally assumed the purpose of the course was for the professor to test whether young kids could learn "college stuff...and we just didn't understand it...It wouldn't have mattered if he had slowed down, you couldn't understand it anyway.

R.H. (boy), age 12
Father's Occupation: Psychology Professor, Researcher, Columbia U.
Mother's Occupation: Grade 1 Grammar School Teacher
Seminar: Creative Writing, Grade 6

A calm boy and not given to rambling on to hear himself talk. R. was poised and pleasant but refused to fill up quiet air. He was almost content with yes and no answers unless I phrased them so carefully he would have to expand.

He said the journalism taught him "how to start out, what a magazine story should contain. The teacher lectured and discussed and then we wrote some articles...A music director spoke on rock-and-roll and we took notes and then wrote articles on what he had to say about it and what we had discussed in class." They also wrote leads at home, in class, and other articles on their own. "I like writing, but not for a career." They also learned, "who, what, when, why and sometimes how goes first."

In novel writing, they "wrote short stories on different ideas; in journalism we had to make a lead pick it up at the beginning to get the person interested and in stories we had to start right into the story with something interesting so he doesn't drop the book at the beginning.

"We discussed different authors and heard stories and learned to develop something the reader is interested in." They wrote some stories and"she gave comments when we read them in class sometimes. The comments sometimes helped make the story better..." and he thought he usually agreed with her.

In poetry "we discussed different types of poems, different rhyming words, the way a poem looks, different writers of poems. The teacher got us these books that had different poems of poets and assigned us to read them and then we discussed them in class... It was interesting...the teacher talked to us about them and discussed them in class...sometimes we wrote our own...I liked doing it when I had a good idea."

"We could have rhyming poems and poems that don't rhyme... free verse, that 's the kind that don't rhyme." He said he enjoyed this course, went to all of them and looked forward to each.

"I think it helped tell when my poems were better or not so good...We learned a lot of important things about famous poems and poets and types of poems. We learned to read and if there wasn't a punctuation mark we kept on going without pausing...Sometimes a poet wrote a poem to somebody he knew...in 'Rime of the Ancient Mariner' he was talking to a person he met at a wedding," R. said. R. assured me he would go to other seminars and would like to take any kind of course. He said the teachers were very nice indeed.

On the telephone, Mrs. H. said the seminars "provided a wonderful opportunity for the kids to have some extra enrichments and utilize free time in an interesting way." She said they were never inclined "to miss one and seemed to enjoy it." Their "interest was strong enough that they wanted to go...it broadened their viewpoint and appreciation." She feels her children have "special abilities and need something more challenging to them. They read a lot and are always interested in many things." She thought R.'s seminar helped "pull his reading level ahead of his years."

B. H. (girl), age 15
Father's and Mother's Occupation: (Same as above)
Seminar: Critical Thinking, Grade 9

Also a calm child of disciplined presence, B. H. does not seem to talk for talk's sake. She had little to say of her course, felt she had not derived much from it, and chose her words carefully. She said the seminars aimed at "getting at, analyzing what we do...mostly theories." "It was pretty foggy," and as he went along he "gave us a lot of formulas"....She kept wishing she had her notes, noted that it "was a long time ago. I don't think I retained much from that course....he taught over our heads. I think Dr. Magid is used to college kids and failed to gear his teaching to younger age groups. He should have considered what we could understand...He has a daughter our age."

B. "got the first part of it...he had a way of using symbols and letters to represent the idea of a sentence. I think I could have done better in an art course. I'm mainly interested in art and English. This is mostly theory - I'd rather have fact. If I brushed up on my notes, though, I think I could use it in my mathematics classes.

She said she went to all the classes she could and didn't miss any intentionally, but the County Chorus rehearsals came on two Saturdays. When she said she enjoyed it, especially since she didn't have much on Saturdays and because this was something new and interesting, I had no reason to believe she was saying so to please me. She said she "did pretty high on some of the tests he gave...and took home some working out in symbols and sentences ...but that to really understand what was going on you need to have gone through high school and understood some basic things..."

She said she would certainly take more seminars, given the chance. "My parents feel this is a good way for children to advance themselves. Others around here want to do away with it because all should be allowed to go." She thinks the children that weren't invited wouldn't have been interested anyway and that if they had been, they could have gotten in.

J. N. (girl),
Seminar: Social Science Grades 10-12

Apparently organized in her thought and sure of each statement, J. enjoyed her seminars very much and would certainly go back. She explained that the three sections had flowed into one another and began a chronological accounting of her work.

"We started with anthropology...and especially went into language and how language helps us. We talked mostly about different races of people and the influence it had on us right now...We discussed how Great Britain influenced our government, and how it helped us with our form of government. Then we studied court cases in the Supreme Court. We split ourselves up into three groups. One group would be the Supreme Court, one would be the Prosecution and one would be the Defendant. We actually got court cases and got all the facts, then we'd go right into it without knowing what the real verdict had been. Once we agreed with the real decision and got very excited about that..."

"We spent a couple of weeks on local government, but that was sort of repetitive...we had all that in school before. I liked the Supreme Court part best, but the last session was very interesting. We started a colony on Venus. Each country had a certain number of people there and we had to develop a government for all of them... just one. It was hard...we had so many different people with different needs.

"Someone who researched for Nixon during the campaign came and talked to us ... different people came in and made it more interesting...though sometimes snow or something made them have to come another time and break up the continuity..." Judy said she herself was occasionally detained by snow or Saturday testing for college, but never intentionally missed a seminar.

"It was a new experience meeting different people in all these fields who go into them at great depth. It really added something to what we learned in school....and they had a different approach. They almost treated us like equals; they respected our opinions. If you're treated like an adult, you think more like one. You do home assignments because you're interested and don't feel you have to do it."

According to J., "these people really seemed interested in their subjects and want other people to find out about and like their fields. It's a nice feeling to know people can care enough about you to come in and do it on a Saturday." She said her parents "were very enthused....my mother wanted to come with me....I used to come home and talk about everything at the seminars and find out their opinions. I told them all about it, and heard a number of parents who wished they could come too. The thing these seminars really showed was we learned about people and how people felt the waythey do because of a creed and how this influences what they think."

R.T. (boy), age 15
Father's Occupation: Public Relations, Free Lance Writing
Seminar: Critical Thinking

R. seems a well-spoken boy, willing to talk but unlikely to volunteer information. He was acquainted with Dr. Magid before the class, although he was not familiar with his field. He spoke immediately of the sharp attendance drop in the class and observed that he guessed "the class was sort of high level." R. said "critical thinking is a sort of thinking that tells fallacies and a way to see through advertising and things...I can't really give you a very clear picture of what was going on. Dr. Magid taught certain fallacies and why some statements can be shown to be true in all circumstances, why some are true in special circumstances only. You would read a statement, then use a big long table he gave us, and you could tell if it was going to be true or false or just true sometimes...

"It was very interesting, but I think if I took it as a college course I don't think I would have passed. I don't think I absorbed too much of it...it was a difficult subject."

Speaking of his thoughts since the end of the course, R. observed, "I wasn't aware (of this kind of thinking) before I took it....I think it helped me think more clearly in some instances... if you see a statement in a newspaper you could tell by how it's worded what it really says...it's very tricky...you sort of see through it."

He thought the course "was not successful for the entire class" although for himself he thinks "it was a good course...I don't think they should try it again unless they try to work in a smaller and very intelligent class." He said he never intentionally missed seminars although school band trips sometimes interfered, and that he did do the occasional home exercises.

Mrs. T. felt the program was a good idea and wished she could have taken the course herself. She said R. never volunteers to talk about such things at home, but that she and Mr. T. were so interested they had asked each week and often were "surprised at some of the things he remembered...he was more enthusiastic at the beginning than in the middle....I was surprised this course was not given to some of the older kids. I think he would take another course in another field."

I. Report on Parent and Community

The representatives from the South Orangetown Parent-Teacher Association Council to the Community Resources Pool were:

- Mrs. Mary Ruth Lund
- Mrs. Jere Vanderhoef
- Mrs. Leah Dalto
- Mr. Dan Friedman
- Mrs. Beatrice Garbor
- Mr. George Keane
- Mr. Eliot Tozer
- Mrs. Betty Friedan

A. Reactions of Mrs. Mary Ruth ~~Hand~~ LUND, President of the South Orangetown PTA Council.

The Parent-Teacher Association Council played three roles in the Community Resources Pool pilot project:

- Initiation of the Pool as a part of the school set-up.
- Took responsibility for explaining the Pool to the Community.
- Made progress reports on the Pool available to the Community.

The initiation of the project came about because of our interest in new methods of education. Our PTA Council sought a way in which we could become a part of a community-enrichment program. The Community Resources Pool was the answer.

The Council began by forming a committee of representatives from all parts of our School District. These people met with professional people and specialists who had already been working on a Resources Pool and made beginning plans for a possible program for the schools. The District Superintendent was included in all discussions and early plans.

After the Community Resources Pool pilot project was underway, our chief Council responsibility was to explain the program to the Community. I went as Council representative to each local PTA meeting in the fall, and gave a brief explanation of our interest in the Pool. The stated purpose of the Council in supporting the program was:

1. To stimulate interest in academic achievement
2. To catch the excitement of creative work in many areas.

At these meetings, I introduced a member of the Resources Pool, who told briefly about his part in the project. In this way, all the Parent-Teacher-Associations were informed and questions were answered.

During the school year, communication was necessary to keep Council members aware of the development and progress of the Pool. At each regular Council meeting, there was a report by the chairman. These reports were taken back to individual PTA units and discussed in their executive meetings.

The PTA Council Community Resources Pool Committee kept in touch with the project at the periodic seminar evaluation meetings, where past performance and goals still to be achieved were discussed.

In the early spring, the PTA Council sponsored a Progress Report Night, where parents were encouraged to make comments and ask questions concerning the project. Teachers and all interested persons were also invited to attend. A panel of teachers and Pool specialists gave a report.

The role of the PTA Council as a liaison group changed as the project evolved. When assistance was needed in bringing together the social scientists and teachers for further clarification of the total aim of this group, the PTA Pool chairman helped bring this about. Another PTA representative was appointed to work with the scientists in the beginning to help them in the planning of their work with children of different age levels. So, in a sense, PTA personnel filled in as coordinators, as well as a liaison committee.

Because of the difficulties involved in getting the music program started, I met with the music coordinator, the music teachers of the various schools and the District Superintendent to help launch and plan the program so as to benefit the greatest number of students in the District.

At every opportunity, the PTA Council pressed for parent reaction to the Community Resources Pool so that a total picture of community reception to this pilot project could be obtained. We realized just how important this community communication was when an attack was made on the Pool by some misinformed citizens. To clear up any misunderstanding, the PTA Council called an emergency meeting, during which wholehearted endorsement of the project was given by the PTA Council itself.

They go to school on Saturday–by choice!

TODAY'S LIVING March 12, 1961

First thing on Saturday mornings, when boys and girls are supposed to be contented as kings to have a free day, some 150 youngsters in Rockland County have been going off happily to an extra half-day session at their local high school.

The students, ranging in age from about 10 to 18, spend their Saturday mornings exploring any of half a dozen provocative subjects — from the workings of modern electronic computers and the forces underlying current tensions in the Congo to the essentials of creating an effective novel or designing a skyscraper.

The young scholars are eager participants in an unusual educational experiment that's been under way since last fall in the county's South Orangetown Central School District. The project brings authorities in the worlds of science, social science, art, creative writing, and critical thinking into the school system as special instructors.

Teachers of the Saturday sessions, many of whom have never taught before, are all residents of Rockland County. The concept of using their skills to advance children's education was originated by Betty Friedan, also a Rockland County resident and professional writer, who maintains: "If children could live in the world of the professional — even for just a couple of hours a week — it might make them want to learn more."

Mrs. Friedan first implemented this idea about three years ago, when, with the backing of the local Rockland Foundation, she recruited a handful of specialists in various fields who agreed to lead seminars for small groups of youngsters in their own homes or in available community buildings. The roster of instructors has since grown to a list of about 100 local professionals, including professors at local colleges, scientists at nearby laboratories, well-known artists, architects, philosophers, and writers.

About 30 members of the new Community Resources Pool are now taking part in a project aimed at using their special gifts and experience for the enrichment of the public-school curriculum.

The Orangetown school program, scheduled to run until spring as a pilot project, is being financed by a $13,000 grant from the New World Foundation. The youngsters go free; the instructors are each paid $15 a session. The Saturday sessions, which consist of nine seminars in the five different areas — science, social science, art, creative writing, and critical thinking — are being co-ordinated for the school district by Arnold Rist, director of pupil personnel services for the schools.

Youngsters attending the weekend classes at Tappan Zee High School are in grades 5 through 12 during the regular school week, and were chosen from a list of 300 recommended by teachers and guidance staff at the seven district schools. They were picked not so much for their good grades or lofty I.Q.s, says Rist, as for more subtle qualities such as creativity and intellectual curiosity, or at least a potential in these directions that the program might activate.

Rist also explains that the aim of the program isn't to prod the youngsters to learn formal facts or techniques about a subject, but rather to help them get, from a practitioner in the field, a sense of what it's really like to discover something new in science, create a work of art, or solve a knotty problem in philosophy or political science.

Not just extra hours

Superintendent of Schools E. S. Michelson, whose initial interest in the project paved the way for its approval by the Board of Education, maintains firmly that the Saturday seminars are by no means a substitute for systematic instruction by the classroom teacher. They aren't merely an extracurricular frill, either, he says, but rather a rich supplement to the school curriculum that "even accomplished classroom teachers haven't the time or perhaps the background to provide."

Class teachers are closely involved with the program; they work with the seminar leaders in planning the curriculum and sometimes extend a seminar project into the regular school day. For example, youngsters attending the art seminar earlier this winter planned the project of designing a fire tower for a nearby mountain, pursuing it under the regular art teacher's direction during activity periods at school. And more recently other projects

A group of seven Rockland County schools are conducting an experiment in enriched education.

spawned on seminar time — the youngsters redesigning their own rooms or planning new landscaping for the back yard — have been continued during the regular school day.

The matters discussed by the Saturday tutors and their students are often far afield from what's taught in weekday classes. (At least it seems that way to the interested visitor who makes the rounds of the seminars in session these days.) A group of 10- and 11-year-olds (mostly girls) is exploring the workings of electronic computers, tackling such awesome questions as "How do you suppose a machine remembers numbers?" and learning a great deal about how it does before the session is over. A creative-writing group of about the same age, under the tutelage of novelist Dorothy Davis, is figuring out how to write descriptions of common objects so that a blind man could feel he was "seeing" them.

An older group, led by a specialist in foreign policy, is soberly considering the dilemmas that currently plague France in its relation to Algeria, and another is being tutored in the essentials of critical thinking by a philosophy professor at a New York City college.

Other groups spend sessions at studios of famous local artists and sculptors, observing their ways of working and the evolution of their styles; still others pass Saturday mornings conducting scientific experiments with yeasts and molds, growing cultures of microscopic plant and animal forms, or creating the plot for a half-hour mystery play, using eerie local landmarks for the settings.

In any case, the youngsters chosen to attend the seminars have clearly found them a challenge, for 95% have attended regularly since the program began.

"Frankly, we've been surprised at the high attendance rate," Mrs. Friedan admits. "Some of us were a bit skeptical about the staying power of youth, especially when you consider that no one makes these students come and that it's on their own free time."

What do the youngsters themselves say? Why do they want to attend Saturday classes when they could be loafing or romping with their pals? Some of them show a nearly boundless eagerness to learn anything they can about the world, or science, or art — and an impatience to learn it *right now*. One sixth-grade girl in the seminar on computer mathematics says, "I'm here because it's time I learned how a computer works. They're using one in my father's office and in many companies now, so it's important for me to learn what it does and how it does it."

Some of the youngsters look for aid and inspiration for personal interests. One boy of 12, who attends the poetry seminar, has "a drawer full of poems I've written since I was nine, and I just have to find out if they're any good."

Others are frankly hoping to learn from the professionals which profession would be best for them, such as the high school boy in one of the art seminars: "Since I was little I've been saying that I wanted to be an architect, but I didn't have any idea of what an architect really does. Our group spent three sessions with an architect, one of them at his office watching him work. Now I think I know whether I should become one." (He thinks he should.)

A few boys and girls admit they began going to the seminars mostly because somebody pressed them. "My teacher tells me I'll get something here that I won't get anywhere else," says one. "That's the only reason I'm here." A teenage girl volunteers, while waiting for her seminar to begin, "I'm here early not because I can't wait, but because my mother thinks it will make a good impression. She's worried about my getting into college, you know." Superintendent Michelson admits that parental pressure operates in some cases. "But mostly," he says, "youngsters go regularly because the chance to work with these specialists provides a tremendous motivation."

The program's value in helping a youngster choose a career is one of its prime assets, Michelson and Rist emphasize. Says Rist, "By the time children get to about the ninth grade, they often feel

They're offering selected students weekend seminars with local residents who are leaders in their professions.

pushed by the adults around them to start thinking about a choice of career, but at that age they still don't know what their true interests are. By exposing the boys and girls to different professions, we hope to help them become aware of what they really like and can do."

All of this may explain why the Saturday classes are interesting and inspiring to the youngsters, but how about the instructors? What makes them want to spend *their* free time teaching children? Some of them do it for the fun of sparking some youngster's curiosity — for the challenge of trying to explain complex facts about complex matters in terms their young students can understand.

Some are impressed by the youngsters' serious purpose, such as the two instructors in a science unit who say, "These are boisterous 10-year-olds, but not a single piece of equipment — not even a slide — has been broken." And for several of the instructors, teaching is a way of doing something that's personally important to them. "Crystals interest *me*," says Dr. Nathaniel Arbiter. "That's one reason we're studying them." Arbiter, a professor of mineral engineering at the Columbia University School of Mines, heads a Saturday science seminar that's been studying the properties of various crystalline materials, and actually growing them in glass jars with certain chemicals suspended in solution and kept at a controlled temperature.

They didn't want to stop

The class, incidentally, is apparently as intrigued with crystals as Arbiter is. The project was to end after six weeks, but the class members voted to extend it for another six. (Seminars are divided into three units of six weeks each, and most groups switch to new projects within the same field of interest at the end of each six-week period.)

Arbiter offers a second personal reason. At the college where he teaches, he says, entering students seem tougher to teach these days because of difficulty in making the transition from high school to college. "We've had to upgrade pre-engineering courses to accommodate some of the newer knowledge. But to know more about the reasons for the difficulty, I want to find out how much today's students in junior high and high school understand about scientific method and how they're learning science. That's what the boys and girls in the group are teaching me."

Robert Sennish is an instructor in literature at Brooklyn College on weekdays and leads a poetry seminar at Tappan Zee on Saturday mornings because of his conviction that young people not only *should* know how to read and evaluate poetry, but would find it pleasurable if they tried. Too many of the students he meets at college are indifferent to poetry, can't understand it, have perhaps never read it, "and therefore," he says, "don't know that once they learn to understand poetry they can read anything." He's counting on his students in Orangetown to learn to know poetry and like it before the seminar sessions come to an end.

The seminars end sometime in April, when the project will be formally evaluated by the seminar leaders, school-district officials, teachers, parents of the participating students, and the students themselves. "The report will be important to us in planning how to extend the program in Rockland County," says Michelson, "and important also to the educators all over the country who've been watching our experiment and wanting to know whether to set up similar projects in their own communities."

As for many Rockland County parents, they don't need to wait for an official report to convince them that their youngsters' education is being advanced by the weekly sessions. It's especially true of those parents who call for a son or daughter after each session is over. They find that, even after spending the better part of the morning in class, neither the instructor nor the youngsters want to call it a day.

THE AUTHOR surrounded by volunteer Saturday School children holds their interest in his class on journalism and creative writing.

SATURDAY SCHOOL

Youth's appetite for learning stimulated through community effort

By ELIOT TOZER

THINGS were almost normal when classes began on the morning of Nov. 5 in the Tappan Zee High School (Rockland County). The desks stood in neat, first-class-of-the-day rows. The kids yelled and pushed as they piled through the door. The teachers clucked for order.

But . . . Nov. 5 was a Saturday.

And the kids were not all high schoolers. Among the 150 students who attended class that day were several fifth- and sixth-graders.

And the teachers were a little unusual. One was an associate professor of philosophy at The City College, New York. Another was a professor at the Columbia School of Mines. Among the others were an architect and a television producer.

And scurrying among the kids and their teachers were a dozen reporters and photographers from *The New York Times* and several Rockland County newspapers.

For Nov. 5 marked the beginning of an exciting educational experiment, an experiment that has set all of South Orangetown Central School District on its collective ear.

The aim of the experiment is simple: to enrich the school curriculum through the use of local scientists, artists and writers. Active professionals lead seminars in their specialties for two-hour periods on Saturday mornings.

Community Resources Pool

But, simple as it seems, the experiment, called the Community Resources Pool, was a long time developing. And the committee that set it up has had several surprises, some pleasant, some not so pleasant, during the first few weeks of operation.

The Pool's school "year," which runs 18 weeks, from Saturday, Nov. 5 to Saturday, March 25 is divided into three six-week trimesters. Some "courses" run six weeks, some the full 18 weeks. Classes meet between

10 a.m. to 12 noon—except when the field trips require longer sessions. Seminars are offered in science, social science, art, creative writing, and critical thinking.

Here is a typical course outline — for social science. The first six-week trimester was devoted to anthropology. Under coordinator Dr. John Landgraf, professor at N.Y.U., the students, Tappen Zee high schoolers, spent two sessions studying the geography and biology of man. In the third session they considered socialization, personality and culture under Dr. Theodora Abel, a practicing psychologist. In the remaining seminars they studied anthropological views of economics, history and language under Dr. Landgraf and Dr. Sloan Wayland, Teachers College, Columbia University.

In the second trimester the group will explore political behavior under Isabel Savell, a member of Governor Nelson Rockefeller's staff at Albany; John Kraft, president of John Kraft, Inc., political statisticians; and James K. Anderson, Columbia University.

In the final trimester they will study the ideas on which are based the federal and state constitution with Milton Carrow, a successful attorney at law of New York City. With Mr. Carrow, the high schoolers will argue the merits of the concepts of separation of powers, judicial review, due process and checks and balances.

A NEW experience for teacher and student. A rewarding one for each of them.

In another class, Critical Thinking, under Dr. Henry Magid, associate professor of philosophy, The City College, New York, ninth-graders have analyzed fallacies in the use of language. In weeks to come they will explore propaganda, kinds of meaning, techniques of deductive logic and the scientific method.

One reporter on opening day looked at the course list and snorted, "High school kids will never buy that long-hair stuff." But they do. And the students are not necessarily the eggheads of South Orangetown.

Students Enthusiastic

Says Mrs. Betty Friedan, who originated the Community Resources Pool, "The students who were invited to participate were specifically chosen because of their 'interest' and 'potential' — not because they had a high I.Q. And we know now that our criteria were valid; the kids thoroughly enjoy their classes."

Attendance figures, presumably a fairly reliable indicator of interest, are almost unbelievable. Although attendance is completely voluntary and although students know they will get no public-school credit for participation in the outside seminars, there has been almost no drop-off in attendance.

With a touch of irony, Arnold Rist, Director, Pupil Personnel Service, South Orangetown Central School District, says, "In a way, the high attendance is kind of embarrassing. The Community Resources Pool Committee agreed from the beginning that classes should be small to insure individual attention to students. We arbitrarily set a limit of 15 students per class. But after we gave the orientation lecture to potential students for the Creative Writing class, for example, all 20 in the group signed up. We could hardly say 'No.' Now, 20 kids show up every Saturday."

When Dr. Magid first outlined his Critical Thinking Project to 27 potential students, 26 of them signed up to take the course on the spot. After his talk, Dr. Magid, curious, spoke to the lone hold-out. The boy said airily that he would like to "abstain" for a few days. But when classes began on Nov. 5 the hold-out showed up.

"I thought," quips Dr. Magid, "that was a fair example of critical thinking in itself."

And so it has been in all the subject areas: classes that are embarrassingly large, made up of students who refuse to stay home from school on Saturday.

Workshop

In addition to the six-week Saturday seminars, there are two other elements of the experiment. The writers are holding a series of sessions during the regular classroom periods in poetry, the short story and nonfiction writing. Ted Merrill, editor, *Business Week*, is working closely with Tappan Zee High School's newspaper staff.

And the scientists and social scientists have agreed to hold seminars in their fields for the teachers themselves.

If all this sounds a little too good to be true, note that the experimental seminar program did not spring full-blown into being. It has its roots deep in a two-year-old program sponsored by the Rockland Foundation, a group of citizens interested in promoting the arts.

In 1958 a Rockland Foundation committee under Mrs. Friedan established the Intellectual Resources Pool, a collection of talented lay people who were willing to teach small classes in order "to give children a sense of what it is really like to discover something new about the world, to create a work of art, or to solve a problem of society."

Seminars were held in art, writing, science and social science and logic at the Foundation building in West Nyack and in borrowed public school classrooms on Saturdays for children from all over Rockland County. Professionals like psychoanalyst Louis English and Dr. Charles Drake of nearby Lamont Geological Observatory found they could spark interest in kids in their field.

Last year, the South Orangetown PTA Council, composed of representatives of the five recently centralized school districts of South Orangetown, asked the district superintendent, Dr. Eino S. Nichelson, whether a similar program might not be established in the local schools. They specifically requested that it serve as a direct adjunct to the school program — not as an extracurricular frill. Dr. Nichelson and high school principal Anthony Barone agreed and empanelled groups of teachers to work with PTA Council members and Rockland Foundation members in the establishment of the Community Resources Pool.

Financial Aid

At about the same time the New World Foundation, an organization set up in 1954 as a legacy of the late Anita McCormick Blaine, daughter of Cyrus McCormick, expressed interest in the South Orangetown project and authorized a grant of $13,000 to determine whether the Community Resources Pool could be developed for use by other districts throughout the United States.

With this monetary blessing and with the cooperation of school administration, teachers and lay professionals, the Community Resources Pool slowly but steadily took shape. On Nov. 5 it became a living, breathing reality.

Like a prairie fire, it has created excitement in a widening circle. Almost before the newspaper reports of the opening day had hit the stands, requests for information began filtering into the New World Foundation and the Rockland Foundation. They came from near — neighboring school districts in Rockland County—and far—from New Jersey, Connecticut, California. Most inquiries wanted to know how they could establish a similar project—quickly.

As part of their responsibility to the New World Foundation, Pool committee members and seminar instructors are preparing a detailed report which will, hopefully, show these other districts how they can efficiently set up their own pools.

IT IS A challenge to the teacher to keep ahead of the children's insatiable curiosity and eagerness to learn more things than are usually available in regular classes.

The way to success has not been completely smooth. In the early stages some teachers expressed misgivings about the plan. It was apparently not made clear enough that the seminars would in no sense be a substitute for the systematic teaching of the body of factual knowledge, which can best be accomplished by the classroom teacher.

And there were the usual doubts and questionings caused by anything new.

Further, some PTA members, anticipating a squeeze on their pocketbooks, wondered whether the token $15 per session now paid the instructors from the New World Foundation grant might not next year come out of the taxpayers' pockets if the experiment were continued.

Still, despite these few, uneasy ripples on the "pool," Mrs. Friedan and the members of her committee are pleased with progress to date. How could they help but be when this discourse took place the week before Thanksgiving:

Instructor: "There will be no seminar next Saturday."

Student: "Aw, why not?"

Instructor: "Because of the holiday."

Student: "Thanksgiving's on a Thursday. Why can't we have our usual class on Saturday?"

Instructor: (thinking fast): "Well, the building won't be open."

Student: (thinking faster): "What difference does that make? It's not open any Saturday. Let's have a class."

Instructor: (desperate): "The classrooms probably won't be heated."

Student: "We could wear our jackets."

Instructor: (firmly): "There will be *no* class next Saturday. But there will be the Saturday after that!" ■

THE RECORD, WEDNESDAY, JUNE 14, 1961

Resource Pool Gets New $15,000 Grant

Expansion Of Activities Is Planned For South Orangetown Program

Nyack — The sum of $15,000 has been granted by the New World Foundation for the continuation of the South Orangetown Community Resources Pool in 1961-62.

WORKERS PRAISED

Announcement of the grant was made last night by the Rockland Foundation through Mrs. Betty Friedan, originator of the project and co-ordinator of the pilot program conducted in Tappan Zee High School this year. The fund will again be administered by the Rockland Foundation.

In announcing the coming year's grant to continue the resources experiment the directors of the New World Foundation expressed satisfaction over the accomplishments of the program just concluded. They advised Dr. Louis English, director of the Rockland Foundation, that they were also highly impressed by the willingness of the participants and the co-operation of the public-school teachers and administration.

The New World group granted $13,000 last year for the purpose of setting up and carrying out the pool, first of its kind in the nation. To this year's grant of $15,000 will be added $2,000 approved by voters at last month's school elections.

The additional funds will be used, Mrs. Friedan said, to expand the second program. Because the Saturday seminar 6-week semesters were inadequate to complete the program desired by both students and teachers the first year, there will be two 9-week semesters in 1961-62.

In addition to these seminars there will be a 10-week series of programs in art, social science, politics, and writing as part of the regular classroom schedule. These courses will be available to students in grades 6 through 12 who show special interest in any or all of these subjects.

OTHERS TO BENEFIT

Schools other than Tappan Zee High School will benefit from the expanded program, Mrs. Friedan said. Twenty concerts by professional musicians of Rockland County are planned to reach every child in the six schools that comprise District No. 1.

District teachers will be invited to attend the Saturday morning seminars of the second year, in order to insure better co-operation between their schools and the resources pool.

During the first year of Saturday seminars 250 students participated in the pool. This is approximately 20 per cent of the student population at Tappan Zee High. Under the new grant it is expected that 350 to 400 children will be able to take part in the Saturday sessions and that all will be affected by the programs in the regular school day.

AIDS STUDENTS

The pool program puts outstanding educators living in the community in touch with students who show special aptitude or liking for the many subjects offered. Nationally known college professors and scientists will teach again this year.

High lights of the first program included trips by the art class to New York City to study architecture and city planning, with the bus serving as a traveling schoolroom; the discovery that students could handle work of a higher intellectual level then had been expected; the presentation of concerts by professional musicians in the district schools; and an exploration of the horizons of medicine at Columbia University Medical Center.

A number of scientists taking part in the Saturday seminars expressed astonishment at the ability of sixth graders.

A full evaluation of the first year's program is now being completed and will be available this summer.

BERGEN RECORD 6-28-61

Pool Professor Out Of Line, Tappan Zee Teachers Charge

Community Resources Project Is Blasted At South Orangetown Board Meeting

Orangeburg — Charges of objectionable teachings by college professors associated with the Community Resources Pool project were made by Tappan Zee High School teachers last night at the meeting of the South Orangetown District No. 1 School Board.

OVERFLOW CROWD

A record crowd turned out for the meeting. It had been announced in advance that a report on the project would be made, and the session had to be shifted from the administrative office of Greenbush School to the Tappan Zee High School auditorium.

The session began in orderly fashion with a report on the Pool by Mrs. Betty Friedan, who created it in co-operation with the Rockland Foundation. During her report Mrs. Friedan asked several parents to report their reactions to the work of the pool. All were in favor of the work accomplished during the year and of continuing with an expanded program.

A committee representing Tappan Zee High School teachers, however, was not so enthusiastic. It charged the Resources Pool administrators with failure to keep its members fully informed on the Pool's activities. Mrs. Friedan's right to make a confidential report to the New World Foundation, sponsor of the program, was challenged.

Teachings of some of the college professors who co-operated in the pool were also challenged by the teachers' group. Spearheading the attack was Mrs. Florence Blum, head of the social science department at Tappan Zee, who charged that some statements were made in an anthropology class that should not have been made in a classroom.

This charge drew a demand from Dr. John Landgraf, New York University anthropologist, that Mrs. Blum publicly reveal what had been said and let the audience determine its propriety. Mrs. Blum demurred, but under Dr. Landgraf's threat that he would consult an attorney in the matter, Anthony Barone, Tappan Zee principal, said the objectionable reference was to a function of the female body in a mixed class of boys and girls.

Dr. Landgraf said he had taught a class in anthropology and that such subjects could not be avoided. "Anthropology," he declared, "has to do with the bodies of men and women and their functions. In this class I did not use college words to describe these functions. I chose my words very carefully and, in my opinion, said nothing that should not be said in a class on this subject."

Asked by board members why the teachers' group was dissatisfied with the conduct of the Pool, Mrs. Blum said, "We could not get them to set up an objective. They asked us to help evaluate the accomplishments of the program, but we, as teachers, refused because no objective had been set up at the beginning of the program. You just can't evaluate under these circumstances. You have nothing to aim at or compare with."

The session. continued until 1 A. M. Just before that hour board member Stanford Gwilliam made a motion that the program proposed for next year be accepted. A grant of $15,000 from the New World Foundation has already been made to finance the project.

A vote was finally taken and the motion was approved, 3 to 2. Anderson and Skahan dissented, with Darner, Gwilliam, and Chester Stover voting in favor.

JOURNAL NEWS 6-28-61

Resources Pool Under Criticism

The conduct of the community resources pool experiment came in for some criticism from teachers at the Board of Education of South Orangetown No. 1 last night at Orangeburg.

The teachers did not object to the project itself but raised specific objections to some of the methods used to advance it.

It seems that a confidential report from an official of the resources pool to the superintendent of schools got into the hands of a teacher by error, and fireworks followed.

EDUCATOR SCORES RIGHTIST ATTACKS

'Destructive' Criticism Is on Rise, N. E. A. Parley Hears

By ROBERT H. TERTE

Special to The New York Times

ATLANTIC CITY, June 27—Ideological attacks on the nation's public schools have increased sharply this year, the National Education Association was told today.

In quantity and in variety, according to Edwin W. Davis, the N. E. A. Defense Commission's associate secretary for special studies, the attacks are strongly reminiscent of those in the early Fifties, when the late Senator Joseph R. McCarthy was conducting investigations.

"We went through the McCarthy period and now we have the John Birch era," Dr. Davis said in an interview after addressing a meeting at the N. E. A. convention here. "In the name of anti-communism and anti-socialism, these people lash out at everybody from Eisenhower and Kennedy to the local school teacher."

500 Inquiries Received

In the first five months of 1961, Dr. Davis said, the commission received 500 inquiries from N. E. A. members and chapters concerning 171 organizations and individuals that have criticized the schools. Last year 375 inquiries were received about 180 critical groups and individuals. Thirty-three groups and individuals appeared on the list this year for the first time.

Dr. Davis said the criticism offered by about 80 per cent of these organizations was "destructive" because it did not stick to facts, because it dealt in personalities rather than issues and because it presented propaganda rather than information and indulged in name-calling and the use of the "big lie" technique of repeating falsehoods.

He said that the commission was concerned about the John Birch Societies because their members "claim to be anti-Communist patriots" and have been attacking school programs and teachers and charging that parent-teacher organizations are subversive.

Says Advice Is Welcome

Emphasizing that the N. E. A. was not anti-anti-Communist, Dr. Davis pointed out that the N. E. A. belonged to the All-American Conference to Combat Communism.

As for that 20 per cent of the criticism that has been constructive, he said, "We actually welcome some of this criticism.

"It serves to point out weaknesses in school programs so that courses that are not effective can be overhauled," he added.

"Destructive" criticism, however, can frighten some teachers into avoiding issues that might be controversial, can result in the defeat of bond issues, can damage student and faculty morale and cause teachers to be dismissed unjustly, he said.

The meeting Dr. Davis addressed was one of many committee sessions held today as part of the N. E. A.'s ninety-ninth annual convention. Some 10,000 delegates and observers are attending.

In another development at the convention, Dr. Homer Babbidge Jr., assistant United States Commissioner of Education, said the Office of Education was anticipating, not advocating, participation in education by proposing changes in the structure of the office.

THE NEW YORK TIMES, WEDNESDAY, JUNE 28, 1961.

THE RECORD, THURSDAY, JULY 6, 1961

Voice Of The People

Brilliant Effort

Editor, The Record:

I attended a meeting of the Board of Education of South Orangetown Central School District No. 1 last evening to further argue the points raised in my letter to The Record of June 26.

To my astonishment a good many of our citizenry were present, and involved themselves in the free exchange of expression and impression about our intellectual resources pool grant utilized by this district the past year largely through the fine efforts of our P.-T. A. Council and Mrs. Betty Friedan, with the cooperation of the school superintendent, school board, high-school principal, and high-school teachers.

Free speech was exercised forthwith as charges expressed by a group of teachers against a particular part of the program were discussed openly. Countercharges were consequently made with the additions of vulgarities, personal physical threats, and challenges to our democratic concept by the audience. The consequence of this would have seemed to be the defeat of an acceptance of the grant by the Board for an additional year. May I commend Mr. Stover, Mr. Gwilliam, and Mr. Danner for not allowing this to happen?

The brilliant people involved in this pool, finding the time in their overworked lives to give our children some insight to their greater knowledge, leave one in awe. Our best teachers cannot measure up to their practical and technical ability, and should not have to do so. That this grant has been made possible we must only be grateful. That it is judged completely successful must be a question of time. It has been stressed it is new and not all the youngsters involved seemed to be ready for it. There is no doubt that in time we as parents and voters will have to go far beyond the 10 per cent or so fitted into this concept of additional learning. We seem to be meeting the challenge somewhat with the inception of summer enrichment classes as well as the standard review or make-up classes.

In my past attendance at school board meetings I cannot recall any teacher group or individual teacher resorting to public utterances of dissatisfactions. They resorted to the school superintendent and private conferences with the school board. The secret session is not the most likable, but it is necessary. The privacy of school affairs is not always best served when introduced to a public not properly schooled in the education process. We parents must allow this education process to remain with our educators. Our lack of faith and interference will only ultimately harm our children.

Our teachers work hard, are pretty much underpaid, and most work at two jobs to make a go of it. Their co-operation in this program is to be commended. The parents owe them much. But the teachers themselves must not lack faith in the educational purpose of this grant and interfere to an extent that had almost harmed its continuance.

I think continually of the remark made by one of the gentlemen in the pool, a teacher himself, and quote as accurately as I can: "Teachers, my colleagues, you have done a terrible thing this night."

(Mrs.) MIRIAM JENKINS
23 Devon Drive
Orangeburg, N. Y., June 28, 1961.

ACTION REPORTS

1. Tapping the Community's Intellectual Resources

Orangeburg, N.Y.—Intellectually gifted men, by serving as guest teachers, can contribute much to the schools.

So believes Paul Woodring of the Ford Foundation. "It is not likely that such men will ever want to teach in a self-contained classroom, where they would be required to keep records and take off overshoes," Dr. Woodring told a Teacher Education and Professional Standards conference in San Diego last June. But, he added, schools "can and ought" to use gifted men as members of the teaching team.

The proposition that community brainpower should be tapped for supplementary learning is being tested this winter in an unusual program at Tappan Zee High School in Orangeburg.

Each Saturday from 10 a.m. until noon 150 youngsters meet with guest teachers drawn from the community. The pupils were screened from a list of 300 recommended by 50 Rockland County teachers. The boys and girls were picked for their "creative spark" for such fields as science, engineering or the arts rather than for their high I.Q. or academic brilliance.

The "Saturday staff" includes 30 citizen tutors drawn from the Community Resources Pool of the South Orangetown Central School District. It includes an anthropologist, an engineer, a philosopher, an architect, several scientists and writers and others of similar cerebral vocation. All reside in the county. All may teach whatever they wish to teach. They are paid $15 per session in the 18-week program. Many of the tutors have never taught before.

The purpose of the experiment, according to Mrs. Betty Friedan, an author who is chairman of the project, is to give children an idea of what it's really like to be in a field of intellectual endeavor. "By attending classes under these men," she says, "we think the children can be more easily inspired."

The classes are purely supplementary to regular school work. They do not carry credit.

The sponsor of the program is a local citizens group, the Rockland Foundation. Financial support has come through a $13,000 grant from another private source, the New World Foundation. But district schoolmen have been involved, too.

- The coordinator of the program is Arnold Rist, director of pupil personnel services for the school system.
- In addition to selecting pupils, teachers—particularly department heads—have worked closely with the Saturday tutors.
- The staff will also help in the final evaluation.
- Anthony Barone, principal of Tappan Zee High School, has been active in every phase of the project.

"A school can be quite suspicious of new things, you know," says Mr. Barone. "That's why it has been essential to involve the staff. As a result of this involvement, our teachers have been with the project right along."

Has the use of citizen teachers hurt morale among the regular teachers?

"No," says Principal Barone. "In fact, the Community Resources Pool is actually an encouragement to our teachers."

Glamour goes to school

COMMUNITY PROJECT: SATURDAY SCHOOL

Scientists, artists, writers
make schooltime playtime
(and vice versa)
teaching neighbors' children.

Any subject can be dull in the classroom, yet come alive when taught by an expert in the field. This is the principle of an experiment in Rockland County, N. Y., where children have gone to school on Saturdays to learn from writers, scientists, engineers and other working residents of their community.

The experiment ends this spring; people from all over the U. S., and even a man from Japan, have asked for details.

Shortly after the program began, we headed out to the Tappan Zee High School in Orangeburg, a near-rural town.

The school, a stark modern structure on a vacant stretch of land, is headquarters for the eighteen-week project. Participants are nearly 200 children in grades five through twelve, chosen from more than 300 for creativity, curiosity, and something project supervisors describe as "spark."

"A child should know a scientist to find science interesting. He should realize that being an artist is different from studying art in school," said Mrs. Betty Friedan, one of the originators of the program. The New World Foundation granted $13,000 to test the plan, and Dr. Eino S. Michelson, Superintendent of Schools for the district that includes Tappan Zee, agreed to cooperate.

We asked Dr. Michelson, a former science teacher, whether bringing experts into schools conflicted with regular classroom teaching. "Not at all," he said. "The content of classroom material was worked out beforehand by teachers and specialists.

"None of our science teachers, for example, are specialized enough to introduce youngsters to such fields as seismology, computer mathematics, electronics. The children are getting information they wouldn't ordinarily get. In science alone, oceanography will be taught by Dr. Charles Drake, a geophysicist at the Lamont Geological Observatory, mineralogy by Dr. Nathaniel Arbiter, professor of mineral engineering at the Henry Krumb School of Mines, Columbia University."

The committee that planned the science project stated: "Each student will . . . discover that honest science is not the same as making the experiment come out with the right answer—and to get the feeling that they themselves can discover new things about the world that are not now known."

We wandered down the school corridors, walked into classrooms, sat at child-sized desks to listen to lectures. We were fascinated by a mild-mannered, humorous man teaching "critical thinking" to ninth graders. Later we stopped him in the hall and found that he was Dr. Henry Magid, associate professor of Philosophy at City College in New York.

"This is the most exciting teaching I've ever done," he said. "Students follow my every move—first time here I spoke for two solid hours, without a break, and they didn't get impatient. I have a theory that children excited at the ninth grade level will press their teachers harder in college. They may also find it easier to get into college, and do college work."

In another room, a television class was resuming after an intermission (students called it a "station break").

Their teacher was Lane Slate, handsome television producer wearing a barn-red shirt, who decided that the class should write and produce and film a half-hour television mystery show. One homework assignment: to locate a house in nearby Bedford Village that was ideal for a murder.

"Give me five gangsters," he was saying. "Think hard. And don't fall for the cliché."

A pony-tailed seventh-grader waved a hand. "A real handsome guy. He can be disfigured."

A red-haired boy said, "A roly-poly baritone."

"All right," Mr. Slate said. "Here's the story we have to establish. A rich couple's child is kidnapped. They send in ransom money, but get the wrong child. We can't have a child who's too young--there might be a problem in casting."

After class, Mr. Slate told us, "We had twice as many turn-outs for this class as we thought. I'm trying to teach them what good television is *not*. To cut out the clichés, glib talk, stock phrases that kids associate with television mystery shows. I want them to learn to keep the action fairly simple, the dialogue straight. We hope to film the show with a remote truck, and if it's good, they'll see it on the air."

In another classroom, sixth-grade children watched a film projected by Donald Reihard and Roger Bassett of Lederle Laboratories. It was a class in microbiology.

The two men asked children to look for protozoa, which the youngsters called "scooters."

"Would anyone like to guess how many bacteria are in a colony of bacteria?" one teacher asked.

"Millions."

"Trillions," guessed another.

"Infinity," said a third.

"No, trillions," said their teacher.

(Continued on page 224)

SCHOOL

(Continued from page 223)

We left the gum-drop-chewing microbiologists to meet with Seymour Gurlitz, a Rockland County architect who had just returned from a field trip with a group of students.

"I've never taught before," he said. "But I've found that you can learn by teaching," he said, "I talked for four hours today without stopping.

"We went to New York, saw the Guggenheim, the Seagram Building. I told them that buildings near Grand Central are not attached to the sidewalk--they go right through below.

"About half my students are interested in architecture as a career. They don't regard this in the same way as school--it's what they really want to do. My purpose is not to teach them facts but to awaken interest and understanding. If I've done that, I've succeeded."

Saturday School Is Considered a Privilege by Young Suburbanites

Dr. John Landgraf of New York University's Anthropology Department holds forth on social science before one of special classes at Tappan Zee High School in Orangeburg, N. Y. Selected youngsters, from fifth to twelfth grades, attend Saturday sessions, conducted by residents of Rockland County, many of whom had never taught before.

THE NEW YORK TIMES
Monday, Nov. 7, 1960

CLASSES TAUGHT BY INTELLECTUALS

Rockland Experiment Tries to Stimulate Children With 'Creative Spark'

Special to The New York Times.

ORANGEBURG, N. Y., Nov. 6—One hundred and fifty youngsters went to school on one of their days off yesterday to see what they could learn from working intellectuals.

They will go to school from 10 A. M. to noon for the next seventeen Saturdays, too. And, if their reactions yesterday were any indication, they will do so cheerfully.

The youngsters, from Grades 5 through 12, are taking part in a teaching experiment at Tappan Zee High School.

The experiment was conceived three years ago by Mrs. Betty Friedan, a writer.

"The idea is to give children an idea of what it's really like to be a scientist, architect, engineer or writer," she said before classes began yesterday. "By attending classes under these men, we think the children can be more easily inspired."

The youngsters were screened from a list of 300 recommended by fifty Rockland County teachers representing seven schools in the district. They were selected not for their brilliance or high I.Q., but for their "spark" or "creativity" in such areas as science, engineering or the arts.

The teachers yesterday were Dr. John Landgraf of New York University's Department of Anthropology; Dr. Nathaniel Arbiter, Professor of Mineral Engineering at the Columbia School of Mines; Dr. Henry Magid of the Department of Philosophy at the City College of New York; Donald Reihard and Roger Bassett, both from the near-by Lederle Laboratories; Eliot Tezer, a freelance writer; and Lane Slate, a television writer and poet.

These seven were part of a group of thirty Saturday tutors who will appear on and off during the eighteen-week session, receiving a $15 "token fee" each time. All live in Rockland County.

Members of the "think tank"—the name the youngsters gave the corps of teachers—discussed or taught whatever they wanted. Lane Slate decided his twenty students should pretend to create a half-hour television mystery drama.

"How can we do a mystery show in this town?" a young sage asked. "It's not eerie enough."

"It's the people who make it eerie," Mr. Slate said.

For two hours, the imaginative young minds with a bent for television threw ideas at Mr. Slate. Their homework for next week was to locate a house in Orangetown that was ideal for a murder.

At noon, when the classes were over, Mrs. Friedan said that the Saturday classes were "supplementary" and that there was no attempt to de-emphasize the role of the regular classroom teacher.

At the completion of the eighteen weeks, she said, there would be an evaluation of the impact of the program.

School and Foundation plot uses of I R Pool

ORANGEBURG -- Enthusiastic South Orangetown school administrators, teachers, parents and observers from every school district in Rockland County turned out Monday night at the Orangeburg Jr. High School to hear details of the new pilot study project to be carried out in the So. Orangetown School District by the Rockland Foundation's Intellectual Resources Pool.

The study, result of a recent grant from the New World Foundation, will enable the Resources Pool to work for the first time directly in the public school system. Hope is that methods and procedures worked out can be adapted for use in any public school system. There are two general phases of the study which will be done through seminars of selected groups of utilizing the pool in classrooms under the direction of So. Orangetown teachers.

Specific information coming from the meeting noted that seminar groups, which will run for 18 weeks from end of October to the spring vacation will meet two hours weekly, either late in the school day or Saturday mornings. Each seminar will contain approximately 15 children.

Two seminars will be conducted in the science field, one with a selected group of 5th and 6th graders, the other with students chosen from grades seven, eight and nine. The same format will hold for the creative writing seminars.

An art seminar will be comprised of students selected from both junior and senior high school. Symbolic logic and Philosophy seminars and those in the social sciences will be keyed to the high school age group.

In addition to working with students, the pool will also offer five seminars for teachers on new developments in the sciences, and one in symbolic logic.

In all groups an effort will be made to translate theory into practical application.

Students learning how a television documentary is made will end up making their own.

Working along with the Resources Pool for the past two months have been several planning groups within the South Orangetown School System.

Named as coordinator of the pilot project in the school system by Superintendent E. Michelson, Arnold Rist, director of pupil personnel services in S. Orangetown. He will work under the supervision of principal Anthony Baron of Tappan Zee High School.

Other teachers to work in the program include Michael McGrath, science coordinator for the So. Orangetown Schools; English teachers Mrs. Esther Recknagel, Louise Chaize, Margaret Sucsy, Jacqueline Holland, Phyllis Anwar and Mrs. Florence Bloom, head of the Social science department of the Tappan Zee High School, who will coordinate classroom use of the social art teachers Sondra Shangold and Lillian Forgacs, who will coordinate visits to artists' studios and seminar work with artists, architects and craftsmen.

In addition to working on the pilot study in the South Orangetown school system this next year, the Resources pool will continue to work out preceptorships for gifted students from any county school and also offer help, when possible, to districts which want to set up advanced study groups or seminars using the pool.

, THE COUNTY CITIZEN, June 23, 1960

INTEREST RISES IN TAPPAN ZEE SEMINAR UNITS

High School Students Are Enthusiastic Over Project

GRANT IS $13,000

Orangeburg — The second 6-week period of the Community Resources Pool seminars at Tappan Zee High School got under way Saturday after marking up a 92-per-cent attendance for the first period.

The seminars are being conducted under a $13,000 grant by the New World Foundation which is administered by the Rockland Foundation.

Students, teachers, visiting professors and school authorities alike expressed enthusiasm over the experiment as conducted thus far. Little or no lagging of interest among students developed during the first 6 weeks, it was reported; and the second period was begun as eagerly as was the first, November 5.

One unexpected development occurred. A class of seventh-, and-eighth-graders studing chrystalography under Dr. Nathan Arbiter, of the Columbia School of Mines, asked that it be allowed to devote the next 6-week period to the continuance of these studies. This group was scheduled to move into the study of electronics Saturday.

At the insistance of the youngsters in the group, however, hasty changes were made in the schedule and they will continue their study of chrystals. At Saturday's session they were deep in the complex operations of growing chrystals.

Arnold Riss, co-ordinator of the project, said last night that inquiries had been received from many parts of the country on the progress of the seminars. He said that many P.-T. A. and other interested groups in Rockland County had written asking if an extension of the project to others schools is possible.

"The grant from the New World Foundation," Riss said, "is for use only in the Tappan Zee school and on this particular series of seminars. What can and will be done about other schools in the County must await the outcome of this pilot experiment."

Rockland Independent Nov. 1960

PTA To Study 'Think Tank'

HILLCREST — The newly-formed Hillcrest PTA has asked Dr. Merrill Colton, Superintendent of Schools in Ramapo 2, the school board and interested PTA groups to join them for first-hand information about the "Thank Tank", the Rockland Foundation intellectual resources pool, at Tuesday's meeting at Spring Valley Junior High, 8:30 p.m.

Mrs. Roger Quinones, program chairman, will introduce guest speakers Mrs. Betty Friedan, originator of a new concert in public school education; Arnold Rist of the South Orangetown school district who heads the school system coordinators for the Foundation's project; and Robert Senish, professor of English at Brooklyn College who coordinates the pool's creative writing program.

Dubbed the 'think tank' by one of the 150 students, the pool is now in its third year of creativity and enlists the community's outstanding scientists, lawyers, artists and public leaders to work with students in the public schools. The program is operated under a $13,000 grant from the New World Foundation.

The resources pool directors have been asked for guidance in setting up similar pools in other communities by school boards, PTA councils, educators and lay groups.

In Rockland County 100 resources including psychologists, political leaders, architects, actors, engineers, lawyers and city planners, give youngsters from grades 5-12 a sense of discovery about the world, works of art, governments and the relations of people and nations.